JVC

SERVICE MANUAL

WIDE LCD PANEL TELEVISION

LT-32A60BU,
LT-32A60SJ,
LT-32A60SU

BASIC CHASSIS
FT

InteriArt

T-V LINK



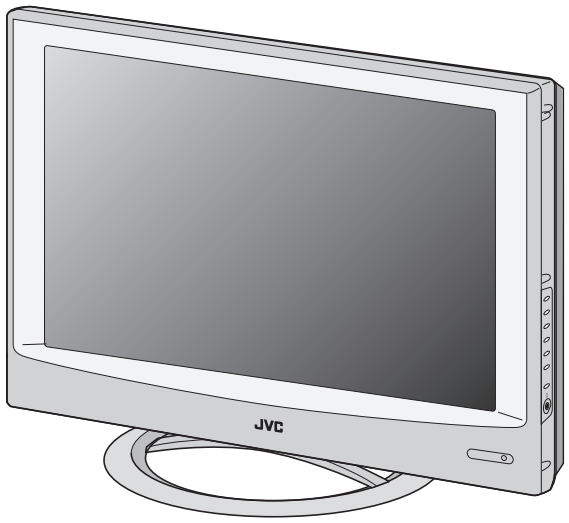


TABLE OF CONTENTS

1 PRECAUTION 1-3
2 SPECIFIC SERVICE INSTRUCTIONS 1-7
3 DISASSEMBLY 1-10
4 ADJUSTMENT 1-15
5 TROUBLESHOOTING 1-19

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No.YA315
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SPECIFICATION

Items		Contents
Dimensions (W × H × D)		82.0 cm × 60.2 cm × 22.5 cm [Included stand] 82.0 cm × 55.1 cm × 12.7 cm [TV only]
Mass		18.8 kg [Included stand] 15.4 kg [TV only]
Power Input		AC110V - AC240 V, 50 Hz / 60 Hz
Power Consumption		158 W (Standby: 2.1 W)
TV RF System		CCIR (B/G, I, D/K, L)
Colour System		PAL, SECAM, NTSC 3.58/4.43 [EXT only]
Stereo System		NICAM (B/G, I, D/K, L), A2 (B/G, D/K)
Teletext System		FLOF (Fastext level 2.5), TOP, WST(World Standard system)
Receiving Frequency		VHF: 47MHz - 470MHz UHF: 470MHz - 862MHz
Intermediate Frequency	VIF	38.9MHz (B/G, I, D/K, L)
	SIF	33.4MHz (5.5MHz :B/G) 32.9MHz (6.0MHz :I) 32.4MHz (6.5MHz :D/K)
Colour Sub Carrier Frequency	PAL	4.43MHz
	SECAM	4.40625MHz / 4.25MHz
	NTSC	3.58MHz / 4.43MHz
LCD panel		32V-inch wide aspect (16 : 9)
Screen Size		Diagonal : 80 cm (H: 69.7 cm × V: 39.2 cm)
Display Pixels		Horizontal : 1366 dots × Vertical : 768 dots (W-XGA)
Audio Power Output		5 W + 5 W
Speaker		6.6 cm, round type × 2 (Oblique corn)
Aerial terminal (VHF/UHF)		75 Ω unbalanced, coaxial
EXT-1 / EXT-2 (Input / Output)		21-pin Euro connector (SCART socket) × 2
EXT-3 (Input)	S-Video	Mini-DIN 4 pin × 1 Y: 1 V (p-p), Positive (Negative sync provided), 75 Ω C: 0.286 V (p-p) (Burst signal), 75 Ω
	Video	1 V (p-p), Positive (Negative sync provided), 75 Ω, RCA pin jack × 1
	Audio	500 mV (rms), High impedance, RCA pin jack × 2
EXT-4 (Input)	Component Video	RCA pin jack × 3
	750p	Y : 1 V (p-p) (Sync signal: ±0.35V(p-p), 3-value sync.), 75Ω Pb/Pr : ±0.35V(p-p), 75 Ω
	625p / 525p / 625i / 525i	Y : 1 V (p-p), Positive (Negative sync provided), 75 Ω Cb/Cr : 0.7V(p-p), 75 Ω
PC (RGB) Input		D-sub 15 pin × 1 R/G/B : 0.7 V (p-p), 75Ω HD / VD : 1 V (p-p) to 5 V (p-p), high impedance < Available signal > VGA : 640 pixels × 480 pixels (Horizontal : 31.5 kHz / Vertical : 60 Hz) XGA : 1024 pixels × 768 pixels (Horizontal : 48.4 kHz / Vertical : 60 Hz)
Headphone		3.5 mm stereo mini jack × 1
Remote Control Unit		RM-C1816S (AA/R6 dry cell battery × 2)

Design & specifications are subject to change without notice.

SECTION 1
PRECAUTION

1.1 SAFETY PRECAUTIONS [EXCEPT FOR UK]

(1) The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

(2) Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

(3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual**. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

(4) **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED (NEUTRAL) : (⏚) side GND and EARTH : (⏚) side GND.
Don't short between the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND and never measure the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND at the same time with a measuring apparatus (oscilloscope etc.). If above note will not be kept, a fuse or any parts will be broken.

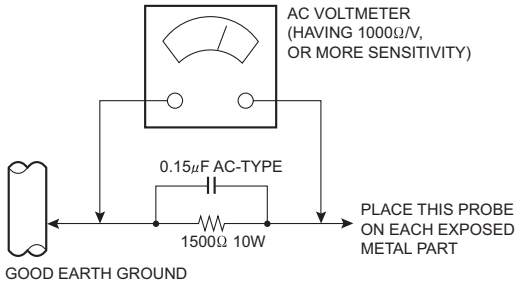
(5) When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

(6) **Isolation Check (Safety for Electrical Shock Hazard)**
After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screw heads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

a) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second. (. . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

b) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

Alternate Check Method
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000Ω per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



1.2 SAFETY PRECAUTIONS [FOR UK]

(1) The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

(2) Alterations of the design or circuitry of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

(3) Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessary be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List of Service Manual may cause shock, fire, or other hazards.

(4) The leads in the products are routed and dressed with ties, clamps, tubing's, barriers and the like to be separated from live parts, high temperature parts, moving parts and / or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.

WARNING

(1) The equipment has been designed and manufactured to meet international safety standards.
(2) It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
(3) Repairs must be made in accordance with the relevant safety standards.
(4) It is essential that safety critical components are replaced by approved parts.
(5) If mains voltage selector is provided, check setting for local voltage.

1.3 INSTALLATION

1.3.1 HEAT DISSIPATION

If the heat dissipation vent behind this unit is blocked, cooling efficiency may deteriorate and temperature inside the unit will rise. The temperature sensor that protects the unit will be activated when internal temperature exceeds the pre-determined level and power will be turned off automatically.Therefore, please make sure pay attention not to block the heat dissipation vent as well as the ventilation outlet behind the unit and ensure that there is room for ventilation around it.

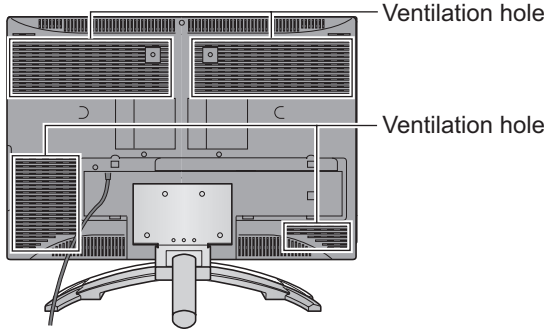


*Diagram differs from actual appearance.

1.3.2 INSTALLATION REQUIREMENTS

Ensure that the minimal distance is maintained, as specified below, between the unit with and the surrounding walls, as well as the floor etc.Install the unit on stable flooring or stands.Take precautionary measures to prevent the unit from tipping in order to protect against accidents and earthquakes.

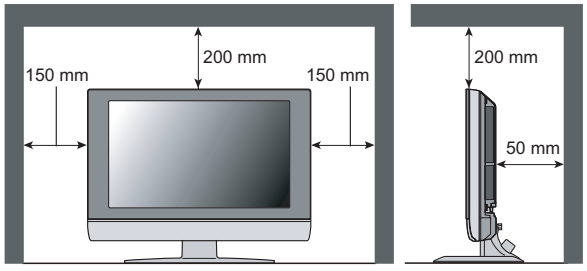


*Diagram differs from actual appearance.

1.3.3 INSTALLATION REQUIREMENTS

To ensure safety in an emergency such as an earthquake, and to prevent accidents, ensure that measures are taken to prevent the TV dropping or falling over.

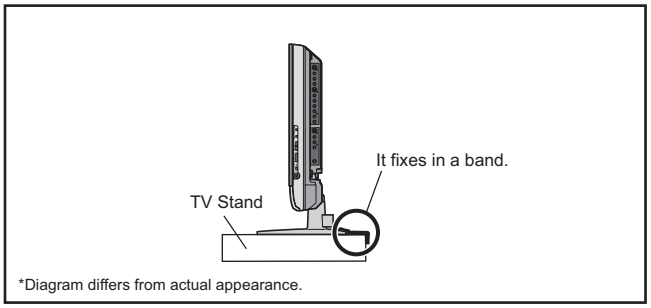


*Diagram differs from actual appearance.

1.3.4 NOTES ON HANDLING

(1) WHEN TAKING UNIT OUT OF A PACKING CASE
When taking the unit out of a packing case, do not grasp the upper part of the unit. If you take the unit out while grasping the upper part, the LCD PANEL may be damaged because of a pressure. Instead of grasping the upper part, put your hands on the lower backside or sides of the unit.

(2) AS FOR PRESSING OR TOUCHING A SPEAKER
Be careful not to press the opening of the speaker in the lower part of the unit and around them since the decorative sheet on the surface of the openings may be deformed.

1.4 HANDLING LCD PANEL

1.4.1 PRECAUTIONS FOR TRANSPORTATION

When transporting the unit, pressure exerted on the internal LCD panel due to improper handling (such as tossing and dropping) may cause damages even when the unit is carefully packed. To prevent accidents from occurring during transportation, pay careful attention before delivery, such as through explaining the handling instructions to transporters.

Ensure that the following requirements are met during transportation, as the LCD panel of this unit is made of glass and therefore fragile:

(1) USE A SPECIAL PACKING CASE FOR THE LCD PANEL
When transporting the LCD panel of the unit, use a special packing case (packing materials). A special packing case is used when a LCD panel is supplied as a service spare part.

(2) ATTACH PROTECTION SHEET TO THE FRONT
Since the front (display part) of the panel is vulnerable, attach the protection sheet to the front of the LCD panel before transportation. Protection sheet is used when a LCD panel is supplied as a service spare part.

(3) AVOID VIBRATIONS AND IMPACTS
The unit may be broken if it is toppled sideways even when properly packed. Continuous vibration may shift the gap of the panel, and the unit may not be able to display images properly. Ensure that the unit is carried by at least 2 persons and pay careful attention not to exert any vibration or impact on it.

(4) DO NOT PLACE EQUIPMENT HORIZONTALLY
Ensure that it is placed upright and not horizontally during transportation and storage as the LCD panel is very vulnerable to lateral impacts and may break. During transportation, ensure that the unit is loaded along the traveling direction of the vehicle, and avoid stacking them on one another. For storage, ensure that they are stacked in 2 layers or less even when placed upright.

1.4.2 OPTICAL FILTER (ON THE FRONT OF THE LCD PANEL)

(1) Avoid placing the unit under direct sunlight over a prolonged period of time. This may cause the optical filter to deteriorate in quality and COLOUR.

(2) Clean the filter surface by wiping it softly and lightly with a soft and lightly fuzz cloth (such as outing flannel).

(3) Do not use solvents such as benzene or thinner to wipe the filter surface. This may cause the filter to deteriorate in quality or the coating on the surface to come off. When cleaning the filter, usually use the neutral detergent diluted with water. When cleaning the dirty filter, use water-diluted ethanol.

(4) Since the filter surface is fragile, do not scratch or hit it with hard materials. Be careful enough not to touch the front surface, especially when taking the unit out of the packing case or during transportation.

1.4.3 PRECAUTIONS FOR REPLACEMENT OF EXTERIOR PARTS

Take note of the following when replacing exterior parts (REAR COVER, FRONT PANEL, etc.):

(1) Do not exert pressure on the front of the LCD panel (filter surface). It may cause irregular COLOUR.

(2) Pay careful attention not to scratch or stain the front of the LCD panel (filter surface) with hands.

(3) When replacing exterior parts, the front (LCD panel) should be placed facing downward. Place a mat, etc. underneath to avoid causing scratches to the front (filter surface).

SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

2.1 FEATURES

T-V LINK

When you have a T-V LINK compatible VCR connected to the EXT-2 Terminal on the TV,it is easier to set up the VCR and to view videos.

PICTURE MODE

This function can adjust the picture settings automatically.

ZOOM

This function can change the screen size according to the picture aspect ratio.

DIGITAL VNR

This function cuts down the amount of noise in the original picture.

2.2 MAIN DIFFERENCE LIST

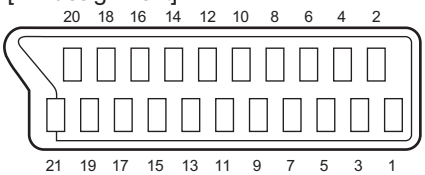
Item	LT-32A60BU	LT-32A60SU	LT-32A60SJ
FRONT PANEL COLOUR	BLACK	SILVER	SILVER

2.3 21-PIN EURO CONNECTOR (SCART) : EXT-1 / EXT-2

Pin No.	Signal designation	Matching value	EXT-1	EXT-2
1	AUDIO R output	500mV(rms) (Nominal), Low impedance	Used (TV OUT)	Used (LINE OUT)
2	AUDIO R input	500mV(rms) (Nominal), High impedance	Used (R1)	Used (R2)
3	AUDIO L output	500mV(rms) (Nominal), Low impedance	Used (TV OUT)	Used (LINE OUT)
4	AUDIO GND		Used	Used
5	GND (B)		Used	Used
6	AUDIO L input	500mV(rms) (Nominal), High impedance	Used (L1)	Used (L2)
7	B input	$700mV_{(B-W)}$, 75Ω	Used	Used
8	FUNCTION SW (SLOW SW)	Low : 0V-3V High : 8V-12V, High impedance	Used	Used
9	GND (G)		Used	Used
10	SCL / T-V LINK		Not used	Used (SCL2 / TV-LINK)
11	G input	$700mV_{(B-W)}$, 75Ω	Used	Used
12	SDA		Not used	Used (SDA2)
13	GND (R)		Used	Used
14	GND (YS)		Used	Not used
15	R / C input	R : $700mV_{(B-W)}$, 75Ω C : $300mV_{(P-P)}$, 75Ω	Used (R)	Used (C2/R)
16	Ys input (FAST SW)	Low : 0V-0.4V, High : 1V-3V, 75Ω	Used	Used
17	GND (VIDEO output)		Used	Used
18	GND (VIDEO input)		Used	Used
19	VIDEO output	$1V_{(P-P)}$ (Negative sync), 75Ω	Used (TV OUT)	Used (LINE OUT)
20	VIDEO / Y input	$1V_{(P-P)}$ (Negative sync), 75Ω	Used	Used
21	COMMON GND		Used	Used

(P-P= Peak to Peak, B-W= Blanking to white peak)

[Pin assignment]



2.4 TECHNICAL INFORMATION

2.4.1 LCD PANEL

This unit uses the flat type panel LCD (Liquid Crystal Display) panel that occupies as little space as possible, instead of the conventional CRT (Cathode Ray Tube), as a display unit.
Since the unit has the two polarizing filter that are at right angles to each other, the unit adopts "normally black" mode, where light does not pass through the polarizing filter and the screen is black when no voltage is applied to the liquid crystals.

2.4.1.1 SPECIFICATIONS

The following table shows the specifications of this unit.

Item	Specifications
Maximum dimensions (W × H × D)	760.0 mm × 450.0 mm × 50.0 mm
Weight	7.5 kg
Effective screen size	Diagonal: 800 mm (H: 576 mm × V: 324 mm)
Aspect ratio	16 : 9
Drive device / system	a-Si-TFT active matrix system
Resolution	Horizontally 1366 × Vertically 768 × RGB < W-XGA > 3147264 dots in total
Pixel pitch (pixel size)	Horizontally: 0.51075 mm Vertically: 0.51075mm
Displayed colour	16777216 colours 256 colours for R G and B
Brightness	500cd/m2
Contrast ratio	1000 : 1
Response time	8ms
View angle	Horizontally: 170° Vertically: 170°
Surface polarizer	Anti-Glare type Low reflective coat
Colour filter	Vertical stripe
Backlight	Direct-type Cold cathode fluorescent lamp × 16
Power supply voltage in LCD	6.5 V
Power supply voltage in inverter	25.2 V
Panel interface system	LVDS (Low Voltage Differential Signaling)

2.4.1.2 PIXEL FAULT

There are three pixel faults - bright fault , dark fault and flicker fault - that are respectively defined as follows.

■ **BRIGHT FAULT**

In this pixel fault, a cell that should not light originally is lighting on and off.
For checking this pixel fault, input ALL BLACK SCREEN and find out the cell that is lighting on and off.

■ **DARK FAULT**

In this pixel fault, a cell that should light originally is not lighting or lighting with the brightness twice as brighter as originally lighting.
For checking this pixel fault, input 100% of each R/G/B colour and find out the cell that is not lighting.

■ **FLICKER FAULT**

In the pixel fault, a cell that should light originally or not light originally is flashing on and off.
For checking this pixel fault, input ALL BLACK SCREEN signal or 100% of each RGB colour and find out the cell that is flashing on and off.

2.4.2 MAIN CPU PIN FUNCTION [U302 : MAIN PWB]

Pin	Pin name	I/O	Function	Pin	Pin name	I/O	Function
1	D1	I/O	Program ROM data for CPU	51	NC2	-	Not used
2	D4	I/O	Program ROM data for CPU	52	XTAL2	O	6MHz for system clock
3	D2	I/O	Program ROM data for CPU	53	XTAL1	I	6MHz for system clock
4	D3	I/O	Program ROM data for CPU	54	NC3	-	Not used
5	XROM	O	This pin must be pulled low to access external ROM.	55	VSSA	-	GND
6	VDD 2.5	I	2.5V	56	VDDA 2.5	I	2.5V
7	VSS	-	GND	57	R	O	R for teletext
8	VDD 3.5	I	3.5V	58	G	O	G for teletext
9	P0.0	I/O	Address/Data for scaler IC	59	B	O	B for teletext
10	P0.1	I/O	Address/Data for scaler IC	60	BLANK/COR	O	Ys for Teletext
11	P0.2	I/O	Address/Data for scaler IC	61	NC4	-	Not used
12	P0.3	I/O	Address/Data for scaler IC	62	P1.7	O	Reset for Scaler IC [H=Reset]
13	P0.4	-	Not used	63	NC5	-	Not used
14	P0.5	O	Address latch Enable	64	WR	O	Write for memory
15	P0.6	-	Not used	65	RD	O	Read for memory
16	P0.7	-	Not used	66	NC6		Not used
17	ENE	-	Not used	67	A19	O	Program ROM address for CPU
18	STOP	-	Not used	68	A18	O	Program ROM address for CPU
19	OCF	-	Not used	69	A16	O	Program ROM address for CPU
20	EXTIF	-	Not used	70	A17	O	Program ROM address for CPU
21	CVBS	I	Video for teletext	71	A15	O	Program ROM address for CPU
22	VDDA 2.5	I	2.5V	72	FL_PGM	-	Test purpose
23	VSSA	-	GND	73	VDD 2.5	I	2.5V
24	P2.0	I	Scart2 ID [H=Detect]	74	VSS	-	GND
25	P2.1	I	key scan data 1	75	VDD 3.3	I	3.3V
26	P2.2	I	key scan data 2	76	A14	O	Program ROM address for CPU
27	P2.3	I	Scaet1 ID [H=Detect]	77	A12	O	Program ROM address for CPU
28	NC1	-	Not used	78	A13	O	Program ROM address for CPU
29	HS/SSC	I	Horizontal sync	79	A7	O	Program ROM address for CPU
30	VS	I	Vertical sync	80	FL_RST	-	Test purpose
31	P3.0	O	Data Read for Scaler IC	81	A8	O	Program ROM address for CPU
32	P3.1	O	Comunication for adjustment [H=TXD]	82	A6	O	Program ROM address for CPU
33	P3.2	I	TV-Link in	83	A9	O	Program ROM address for CPU
34	P3.3	I	Remote control	84	A5	O	Program ROM address for CPU
35	P3.4	I/O	I2C bus Data(for EEPROM)	85	A11	O	Program ROM address for CPU
36	P3.5	O	I2C bus Clock(for EEPROM)	86	A4	O	Program ROM address for CPU
37	P3.6	O	Data Write for Scaler IC	87	ALE	O	Address Latch Enable
38	P3.7	I	Comunication for adjustment [H=RXD]	88	PSEN	O	Program Store Enable
39	VSS	-	GND	89	A3	O	Program ROM address for CPU
40	VDD 3.3	I	3.3V	90	A10	O	Program ROM address for CPU
41	P1.0	O	RGB Select [L=SCART1, H=SCART2]	91	VSS	-	GND
42	P1.1	I	Headphone Ident [L=Detect]	92	VDD 3.3	I	3.3V
43	P1.2	I/O	I2C bus Data(for inter IC)	93	A2	O	Program ROM address for CPU
44	P1.3	O	I2C bus Clock(for inter IC)	94	A1	O	Program ROM address for CPU
45	P1.4	O	Reset for inter IC [L=Reset]	95	FL_CE	-	Test purpose
46	P1.5	I	PC Detect [L=Detect]	96	D7	I/O	Program ROM data for CPU
47	P1.6	O	Memory Pack I2C S/W [L=Detect]	97	A0	O	Program ROM address for CPU
48	P4.2	O	Main power control [L=ON, H=OFF]	98	D6	I/O	Program ROM data for CPU
49	P4.3	O	TV-Link out	99	D0	I/O	Program ROM data for CPU
50	RST	O	Reset [L=Reset]	100	D5	I/O	Program ROM data for CPU

SECTION 3
DISASSEMBLY

3.1 DISASSEMBLY PROCEDURE

CAUTION AT DISASSEMBLY:

- Make sure that the power cord is disconnected from the outlet.
- Pay special attention not to break or damage the parts.
- When removing each board, remove the connectors as required. Taking notes of the connecting points (connector numbers) makes service procedure manageable.
- Make sure that there is no bent or stain on the connectors before inserting, and firmly insert the connectors.

3.1.1 REMOVING THE STAND

(1) Remove the JACK COVER.
(2) Remove the 2 screws **[A]**, then remove the STAND COVER.
(3) Remove the 2 screws **[W]**, then remove the CABLE COVER.
(4) Remove the 4 screws **[B]**, then remove the STAND.

3.1.2 REMOVING THE REAR COVER

- Remove the STAND.
  (1) Remove the 8 screws **[C]**, 1 screw **[D]** and 2 screws **[E]**, then remove the REAR COVER.

3.1.3 REMOVING THE POWER PWB

- Remove the STAND.
- Remove the REAR COVER.
  (1) Remove the 4 screws **[G]** and 1 screw **[H]**, then remove the TERMINAL BASE.
  (2) Remove the 8 screws **[F]**, then remove the BACK BRACKET.
  (3) Remove the 6 screws **[J]**, then remove the POWER PWB SHIELD.
  (4) Remove the 5 screws **[K]**, then remove the POWER PWB.

3.1.4 REMOVING THE MAIN PWB

- Remove the STAND.
- Remove the REAR COVER.
- Remove the TERMINAL BASE.
- Remove the BACK BRACKET.
- Remove the POWER PWB SHIELD.
  (1) Remove the 7 screws **[L]** and 2 screws **[N]**, then remove the MAIN PWB SHIELD.
  (2) Remove the 6 screws **[M]**, then remove the MAIN PWB.

3.1.5 REMOVING THE KEY PWB

- Remove the STAND.
- Remove the REAR COVER.
  (1) Remove the 2 screws **[P]**, then remove the KEY PWB.

3.1.6 REMOVING THE LED PWB

- Remove the STAND.
- Remove the REAR COVER.
  (1) Remove the 2 screws **[Q]**, then remove the LED PWB.

3.1.7 REMOVING THE SPEAKER

- Remove the STAND.
- Remove the REAR COVER.
  (1) Remove the 6 screws **[R]**, then remove the SPEAKER (L/R).

CAUTION:

Please do not disassembly the SPEAKER.
When the speaker is decomposed, the performance cannot be kept.

3.1.8 REMOVING THE LCD PANEL UNIT

- Remove the STAND.
- Remove the REAR COVER.
- Remove the TERMINAL BASE.
- Remove the BACK BRACKET.
  (1) Remove the 6 screws **[S]**, then remove the MAIN BASE.
  (2) Remove the 6 screws **[T]**, then remove the FRONT PANEL.
  (3) Remove the 2 screws **[U]**, then remove the TOP FRAME.
  (4) Remove the 2 screws **[V]**, then remove the BOTTOM FRAME.

NOTE:

- Pay special attention not to break or damage on the FRONT PANEL.
- The LCD PANEL UNIT is fixed to the FRONT PAMEL (at the back side)by using double-side adhesive tapes. To remove the LCD PANEL UNIT, remove the adhesive tape on the FRONT PANEL slowly.

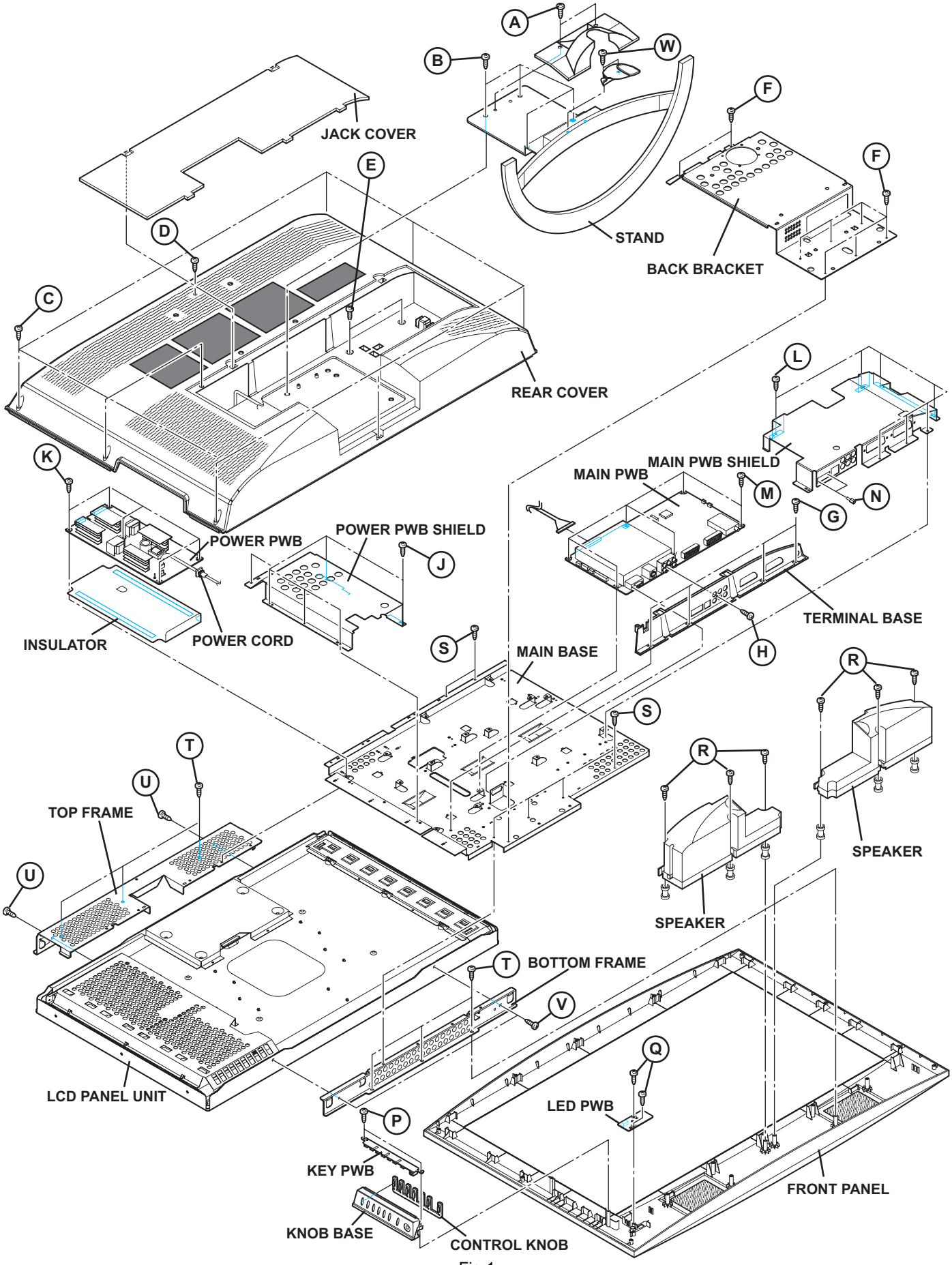

A
B
W
F
F
JACK COVER
E
D
STAND
BACK BRACKET
C
REAR COVER
L
MAIN PWB SHIELD
K
MAIN PWB
M
N
G
POWER PWB
POWER PWB SHIELD
J
INSULATOR
POWER CORD
TERMINAL BASE
H
S
MAIN BASE
S
R
T
U
TOP FRAME
R
SPEAKER
U
SPEAKER
T
BOTTOM FRAME
V
Q
LED PWB
LCD PANEL UNIT
P
KEY PWB
FRONT PANEL
KNOB BASE
CONTROL KNOB

Fig.1

3.2 MEMORY IC REPLACEMENT

- This model uses the memory IC.
- This memory IC stores data for proper operation of the video and drive circuits.
- When replacing, be sure to use an IC containing this (initial value) data.

3.2.1 MEMORY IC REPLACEMENT PROCEDURE

1. Power off
Switch off the power and disconnect the power plug from the AC outlet.

2. Replace the memory IC
Be sure to use the memory IC written with the initial setting values.

3. Power on
Connect the power plug to the AC outlet and switch on the power.

4. Receiving channel setting
Refer to the OPERATING INSTRUCTIONS and set the receive channels (Channels Preset) as described.

5. User setting
Check the user setting items according to the given in page later. Where these do not agree, refer to the OPERATING INSTRUCTIONS and set the items as described.

6. SERVICE MODE setting
Verify what to set in the SERVICE MODE, and set whatever is necessary (Fig.1). Refer to the SERVICE ADJUSTMENT for setting.

3.2.2 SERVICE MODE SETTING

■SERVICE MODE SCREEN

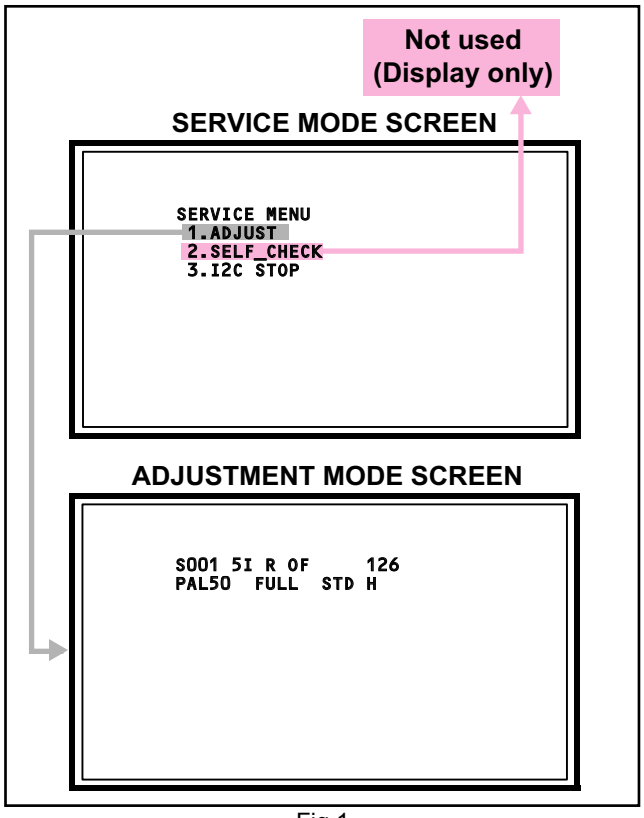


Fig.1

NOTE:
As self check feature is not used in this TV, **"2.SELF_CHECK"** cannot be selected (screen display only).

■SETTING ITEM

Setting items	Settings	Item No.
Video system setting -1	Adjust	S001 - S043
Video system setting -2	Fixed	M001 - M009
Audio System Setting	Fixed	A001 - A003
Video system setting -3	Fixed	D001 - D051

3.2.3 SETTINGS OF FACTORY SHIPMENT

3.2.3.1 BUTTON OPERATION

Setting item	Setting position
POWER	Off
CHANNEL	PR1
VOLUME	10
TV/AV	TV

3.2.3.2 REMOTE CONTROL DIRECT OPERATION

Setting item	Setting position
CHANNEL	PR1
VOLUME	10
ZOOM	PANORAMIC
3D SOUND	OFF

3.2.3.3 REMOTE CONTROL MENU OPERATION

(1) PICTURE

Setting item		Setting position
PICTURE MODE		BRIGHT
COLOUR TEMP.		COOL
FEATURES		
DIGITAL VNR		AUTO (LOW)
COLOUR SYSTEM	TV	Depends on PR/CH
	EXT	AUTO
4:3 AUTO ASPECT		PANORAMIC

(2) SOUND

Setting item	Setting position
STEREO / I•II	Stereo sound
BASS	Centre
TREBLE	Centre
BALANCE	Centre
3D SOUND	OFF

(4) FEATURES

Setting item	Setting position
SLEEP TIMER	OFF
CHILD LOCK	ID NO.0000, All CH off
APPEARANCE	TYPE D
BLUE BACK	ON
FAVOURITE SETTING	Reset

(5) SET UP

Setting item	Setting position
AUTO PROGRAM	TV channel automatically set
EDIT/MANUAL	PRESET CH only
LANGUAGE	ENGLISH
DECODER (EXT-2)	OFF
EXT SETTING	
S-IN	BLANK
ID	BLANK
DUBBING	EXT-1 → EXT-2

3.3 REPLACEMENT OF CHIP COMPONENT

3.3.1 CAUTIONS

(1) Avoid heating for more than 3 seconds.
(2) Do not rub the electrodes and the resist parts of the pattern.
(3) When removing a chip part, melt the solder adequately.
(4) Do not reuse a chip part after removing it.

3.3.2 SOLDERING IRON

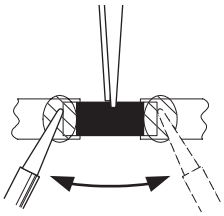
(1) Use a high insulation soldering iron with a thin pointed end of it.
(2) A 30w soldering iron is recommended for easily removing parts.

3.3.3 REPLACEMENT STEPS

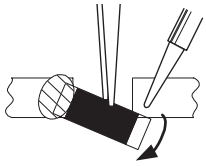
1. How to remove Chip parts

[Resistors, capacitors, etc.]

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.



(2) Shift with the tweezers and remove the chip part.

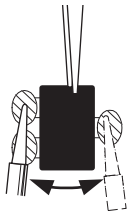


[Transistors, diodes, variable resistors, etc.]

(1) Apply extra solder to each lead.



(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.



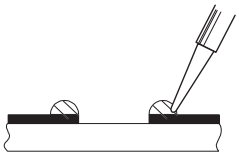
NOTE :

After removing the part, remove remaining solder from the pattern.

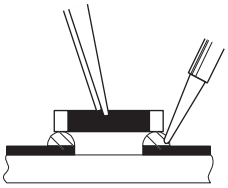
2. How to install Chip parts

[Resistors, capacitors, etc.]

(1) Apply solder to the pattern as indicated in the figure.

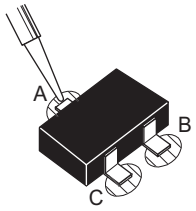


(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

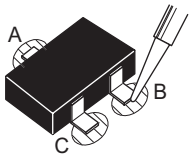


[Transistors, diodes, variable resistors, etc.]

(1) Apply solder to the pattern as indicated in the figure.
(2) Grasp the chip part with tweezers and place it on the solder.
(3) First solder lead **A** as indicated in the figure.



(4) Then solder leads **B** and **C**.



SECTION 4
ADJUSTMENT

4.1 ADJUSTMENT PREPARATION

(1) **The adjustment using the REMOTE CONTROL UNIT is made on the basis of the initial setting values. The setting values which adjust the screen to the optimum condition can be different from the initial setting values.**
(2) Make sure that connection is correctly made AC to AC power source.
(3) Turn on the power of the TV and measuring instruments for warming up for at least 30 minutes before starting adjustments.
(4) If the receive or input signal is not specified, use the most appropriate signal for adjustment.
(5) Never touch the parts (such as variable resistors, transformers and condensers) not shown in the adjustment items of this service adjustment.

4.2 PRESET SETTING BEFORE ADJUSTMENTS

Unless otherwise specified in the adjustment items, preset the following functions with the REMOTE CONTROL UNIT.

Setting item	Settings position
PICTURE MODE	STANDARD
PICTURE adjustments	Centre
COLOUR TEMP.	NORMAL

4.3 MEASURING INSTRUMENT AND FIXTURES

- Signal generator (Pattern generator)[PAL]
- Remote control unit

4.4 ADJUSTMENT ITEMS

■ **VIDEO CIRCUIT**

- WHITE BALANCE (HIGH LIGHT) adjustment

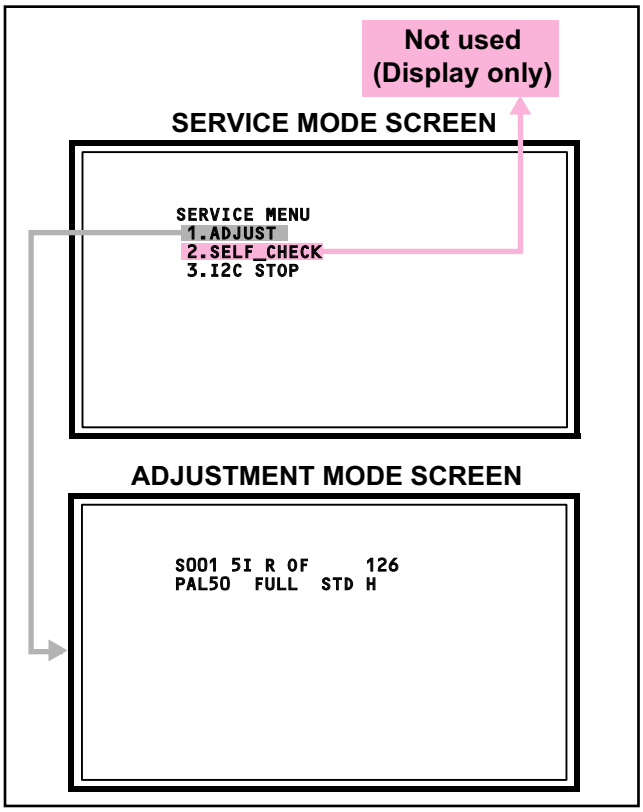
4.5 BASIC OPERATION OF SERVICE MODE

4.5.1 HOW TO ENTER THE SERVICE MODE

(1) Press **[INFORMATION]** key and **[MUTING]** key on the remote control unit simultaneously to enter the SERVICE MODE SCREEN.
(2) In the SERVICE MENU, press the **[1]** key to display ADJUSTMENT MODE SCREEN.

NOTE:

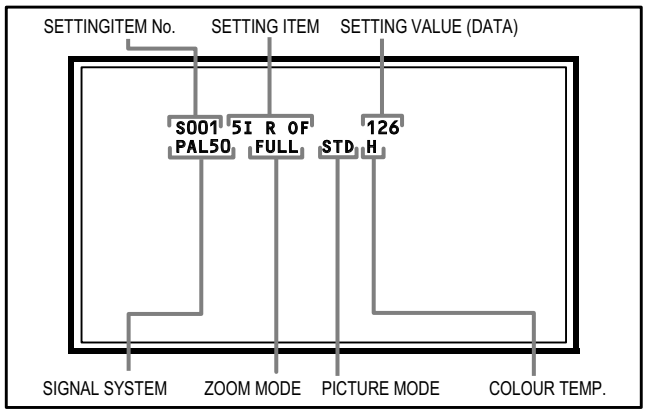
- As self check feature is not used in this TV, **"2.SELF_CHECK"** cannot be selected (screen display only).
- Before entering the SERVICE MODE, confirm that the setting of VCR/TV/DVD switch is at the "**TV**" side. If the switches have not been properly set, you cannot enter the SERVICE MODE.
- When a number key other than the **[1]** key is pressed in the SERVICE MODE SCREEN, the other relevant screen may be displayed.
  This is not used in the adjustment procedure. Press the **[MENU]** key to return to the SERVICE MODE SCREEN.



4.5.2 HOW TO EXIT THE SERVICE MODE

Press the **[MENU]** key to exit the Service mode.

4.5.3 DESCRIPTION OF STATUS DISPLAY



(1) SIGNAL SYSTEM

The signal displayed on the screen is displayed.

PAL50	: PAL50Hz (Composite / S-video)
PAL60	: PAL60Hz (Composite / S-video)
SECAM	: SECAM
NTSC3	: NTSC3.58
NTSC4	: NTSC4.43
525I	: 525i (Component)
525P	: 525p
625I	: 625i (Component)
625P	: 625p
750P6	: 750p 60Hz
RGB5	: RGB 525i
RGB6	: RGB 625i
PCVGA	: PC (VGA)
PCXGA	: PC (XGA)

(2) ZOOM MODE

State of the screen mode is displayed.

NOTE:

In ADJUSTMENT MODE, the screen mode can be set only to **"FULL"**. When it is entered to ADJUSTMENT MODE, it is automatically changed to **"FULL"**, even if the setting is in other screen mode.

(3) PICTURE MODE

State of the picture mode is displayed.

NOTE:

In ADJUSTMENT MODE, the picture mode can be set only to **"STANDARD"**. When it is entered to ADJUSTMENT MODE, it is automatically changed to **"STANDARD"**, even if the setting is in other picture mode.

(4) COLOUR TEMP.

State of the colour temperature is displayed.

NOTE:

In ADJUSTMENT MODE, the colour temperature can be set only to **"NORMAL"**. When it is entered to ADJUSTMENT MODE, it is automatically changed to **"NORMAL"**, even if the setting is in other colour temperature.

(5) SETTING ITEM NAME

Setting item name are displayed. The setting item numbers to be displayed are listed below.

Item No.	Setting item
S001 - S043	Video system setting -1
M001 - M009	Video system setting -2
A001 - A003	Audio System Setting
D001 - D051	Video system setting -3

(6) SETTING ITEM NO.

Setting item numbers are displayed. For the setting item names to be displayed, refer to "INITIAL SETTING VALUES IN THE SERVICE MODE".

(7) SETTING VALUE (DATA)

The SETTING VALUE is displayed.

4.5.4 CHANGE AND MEMORY OF SETTING VALUE

SELECTION OF SETTING ITEM

- **[FUNCTION ▲/▼]** key.
  For scrolling up / down the setting items.

S001... ↔ M001... ↔ A001... ↔ D001...

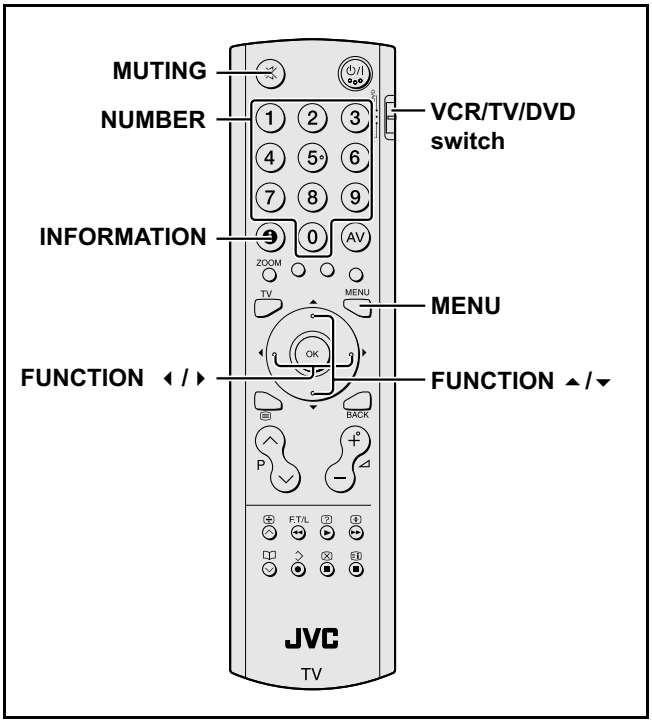
CHANGE OF SETTING VALUE (DATA)

- **[FUNCTION ◀ / ▶]** key.
  For scrolling up / down the setting values.

MEMORY OF SETTING VALUE (DATA)

Changed setting value is memorized by pressing **[MUTING]** key.

4.5.5 SERVICE MODE SELECT KEY LOCATION



4.6 INITIAL SETTING VALUES IN THE SERVICE MODE

- Perform fine-tuning based on the "initial values" using the remote control when in the Service mode.
- The "initial values" serve only as an indication rough standard and therefore the values with which optimal display can be achieved may be different from the default values. But, don't change the values that are not written in "ADJUSTMENT PROCEDURE". They are fixed values.

4.6.1 VIDEO SYSTEM SETTING -1

Item No.	Item name	Variable range	Setting value
S001	5I R OF	000 - 255	122
S002	5I G OF	000 - 255	120
S003	5I B OF	000 - 255	122
S004	5P R OF	000 - 255	122
S005	5P G OF	000 - 255	120
S006	5P B OF	000 - 255	122
S007	HD75 R OF	000 - 255	127
S008	HD75 R OF	000 - 255	127
S009	HD75 R OF	000 - 255	127
S010	HD25 R OF	000 - 255	127
S011	HD25 R OF	000 - 255	127
S012	HD25 R OF	000 - 255	127
S013	R DRIVE	000 - 255	150
S014	G DRIVE	000 - 255	150
S015	B DRIVE	000 - 255	150
S016	HD R DR	-32 - 31	-02
S017	HD G DR	-32 - 31	07
S018	HD B DR	-32 - 31	00
S019	CL R DR	-32 - 31	00
S020	CL G DR	-32 - 31	00
S021	CL B DR	-32 - 31	11
S022	WM R DR	-32 - 31	11
S023	WM G DR	-32 - 31	00
S024	WM B DR	-32 - 31	00
S025	HD CL R DR	-32 - 31	00
S026	HD CL G DR	-32 - 31	00
S027	HD CL B DR	-32 - 31	00
S028	HD WM R DR	-32 - 31	00
S029	HD WM G DR	-32 - 31	00
S030	HD WM B DR	-32 - 31	00
S031	PC R OF	000 - 255	133
S032	PC G OF	000 - 255	121
S033	PC B OF	000 - 255	115
S034	PC R DR	-32 - 31	-15
S035	PC G DR	-32 - 31	14
S036	PC B DR	-32 - 31	10
S037	PC CL R DR	-32 - 31	00
S038	PC CL G DR	-32 - 31	00
S039	PC CL B DR	-32 - 31	00
S040	PC WM R DR	-32 - 31	00
S041	PC WM G DR	-32 - 31	00
S042	PC WM B DR	-32 - 31	00
S043	PC AUTO WB	000 - 001	000

4.6.2 VIDEO SYSTEM SETTING -2 (*Fixed values)

Item No.	Item name	Variable range	Setting value
M001	MV CON	000 - 255	104
M002	MV SHA	000 - 255	128
M003	MV COL	000 - 255	154
M004	MV TIN	000 - 255	048
M005	(Not display)	000 - 255	120
M006	CH MUTE	000 - 001	000
M007	PC R GAIN	000 - 001	097
M008	PC G GAIN	000 - 001	101
M009	PC B GAIN	000 - 001	101

4.6.3 AUDIO SYSTEM SETTING (*Fixed values)

Item No.	Item name	Variable range	Setting value
A001	S BASS	000 - 016	008
A002	S TREBLE	000 - 016	008
A003	3D LEVEL	000 - 063	031

4.6.4 VIDEO SYSTEM SETTING -3 (*Fixed values)

Item No.	Item name	Variable range	Setting value
D001	S CON	000 - 063	029
D002	S BRI	000 - 063	038
D003	S SHA	000 - 008	004
D004	S COL	000 - 063	032
D005	S TIN	000 - 063	032
D006	RGB S COL	000 - 127	032
D007	5I S CON	000 - 063	032
D008	5I S BRI	000 - 063	032
D009	5I S SHA	000 - 063	032
D010	5I S COL	000 - 063	032
D011	5I S TIN	000 - 063	032
D012	5P S CON	000 - 063	032
D013	5P S BRI	000 - 063	032
D014	5P S SHA	000 - 063	032
D015	5P S COL	000 - 063	032
D016	5P S TIN	000 - 063	032
D017	HD S CON	000 - 063	032
D018	HD S BRI	000 - 063	032
D019	HD S SHA	000 - 063	032
D020	HD S COL	000 - 063	032
D021	HD S TIN	000 - 063	032
D022	HD25 S CON	000 - 063	032
D023	HD25 S BRI	000 - 063	032
D024	HD25 S SHA	000 - 063	032
D025	HD25 S COL	000 - 063	032
D026	HD25 S TIN	000 - 063	032
D027	PC S CON	000 - 063	021

Item No.	Item name	Variable range	Setting value
D028	PC S BRI	000 - 063	030
D029	TXT S CON	000 - 127	024
D030	TXT S BRI	000 - 127	016
D031	RGB S CON	000 - 127	048
D032	RGB S BRI	000 - 127	048
D033	STD BRI1	000 - 031	025
D034	STD CON	000 - 031	016
D035	STD BRI2	000 - 031	016
D036	STD SHA	000 - 031	016
D037	STD COL	000 - 031	016
D038	STD TIN	000 - 031	016
D039	SFT BRI1	000 - 031	014
D040	SFT CON	000 - 031	014
D041	SFT BRI2	000 - 031	014
D042	SFT SHA	000 - 031	014
D043	SFT COL	000 - 031	014
D044	SFT TIN	000 - 031	016
D045	BRI BRI1	000 - 031	031
D046	BRI CON	000 - 031	018
D047	BRI BRI2	000 - 031	016
D048	BRI SHA	000 - 031	018
D049	BRI COL	000 - 031	016
D050	BRI TIN	000 - 031	016
D051	PWM	000 - 031	008

4.7 ADJUSTMENT PROCEDURE

4.7.1 VIDEO CIRCUIT

Item	Measuring instrument	Test point	Adjustment part	Description
WHITE BALANCE (HIGHLIGHT)	Remote control unit Signal generator		[1.ADJUST] S013: R DRIVE (Red drive) S015: G DRIVE (Green drive) S017: B DRIVE (Blue drive)	(1) Receive a PAL 75% all white signal. (2) Set PICTURE MODE to "**STANDARD**". (3) Set ZOOM to "**FULL**". (4) Set COLOUR TEMP. to "**NORMAL**". (5) Select "**1.ADJUST**" from the SERVICE MODE. (6) Set **< S013 >** (R DRIVE), **< S015 >** (G DRIVE) and **< S017 >** (B DRIVE) to "**145**". (7) Adjust to Keep one of **< S030 >** (Red drive), **< S031 >** (Green drive) or **< S032 >** (Blue drive) unchanged, then lower the other two so that the all-white screen is equally white throughout. **NOTE:** Set one or more of **< S013 >**, **< S015 >**, and **< S017 >** to "**145**". (8) Check that white balance is properly tracked from low light to high light. If the white balance tracking is deviated, adjust to correct it. (9) Press the **[MUTING]** key to memoirze the set value.

SECTION 5
TROUBLESHOOTING

This service manual does not describe TROUBLESHOOTING.

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(No.YA315)

Printed in Japan
VPT

PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety.
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied.
- P.W. BOARD Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
CR	Carbon Resistor	C CAP.	Ceramic Capacitor
FR	Fusible Resistor	E CAP.	Electrolytic Capacitor
PR	Plate Resistor	M CAP.	Mylar Capacitor
VR	Variable Resistor	CH CAP.	Chip Capacitor
HV R	High Voltage Resistor	HV CAP.	High Voltage Capacitor
MF R	Metal Film Resistor	MF CAP.	Metalized Film Capacitor
MG R	Metal Glazed Resistor	MM CAP.	Metalized Mylar Capacitor
MP R	Metal Plate Resistor	MP CAP.	Metalized Polystyrol Capacitor
OM R	Metal Oxide Film Resistor	PP CAP.	Polypropylene Capacitor
CMF R	Coating Metal Film Resistor	PS CAP.	Polystyrol Capacitor
UNF R	Non-Flammable Resistor	TF CAP.	Thin Film Capacitor
CH V R	Chip Variable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH MG R	Chip Metal Glazed Resistor	TAN. CAP.	Tantalum Capacitor
COMP. R	Composition Resistor	CH C CAP.	Chip Ceramic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
		CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

RESISTORS									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

CONTENTS

USING P.W. BOARD & REMOTE CONTROL UNIT 3-2
EXPLODED VIEW PARTS LIST 3-3
EXPLODED VIEW 3-4

PRINTED WIRING BOARD PARTS LIST 3-5
MAIN P.W. BOARD ASS'Y (QAL0747-001) 3-5
POWER P.W. BOARD ASS'Y (QAL0748-001) 3-9
KEY P.W. BOARD ASS'Y (QAL0730-001) 3-11
LED P.W. BOARD ASS'Y (QAL0731-001) 3-11

REMOTE CONTROL UNIT PARTS LIST (RM-C1816S-1C) 3-11
PACKING 3-12
PACKING PARTS LIST 3-12

USING P.W. BOARD & REMOTE CONTROL UNIT

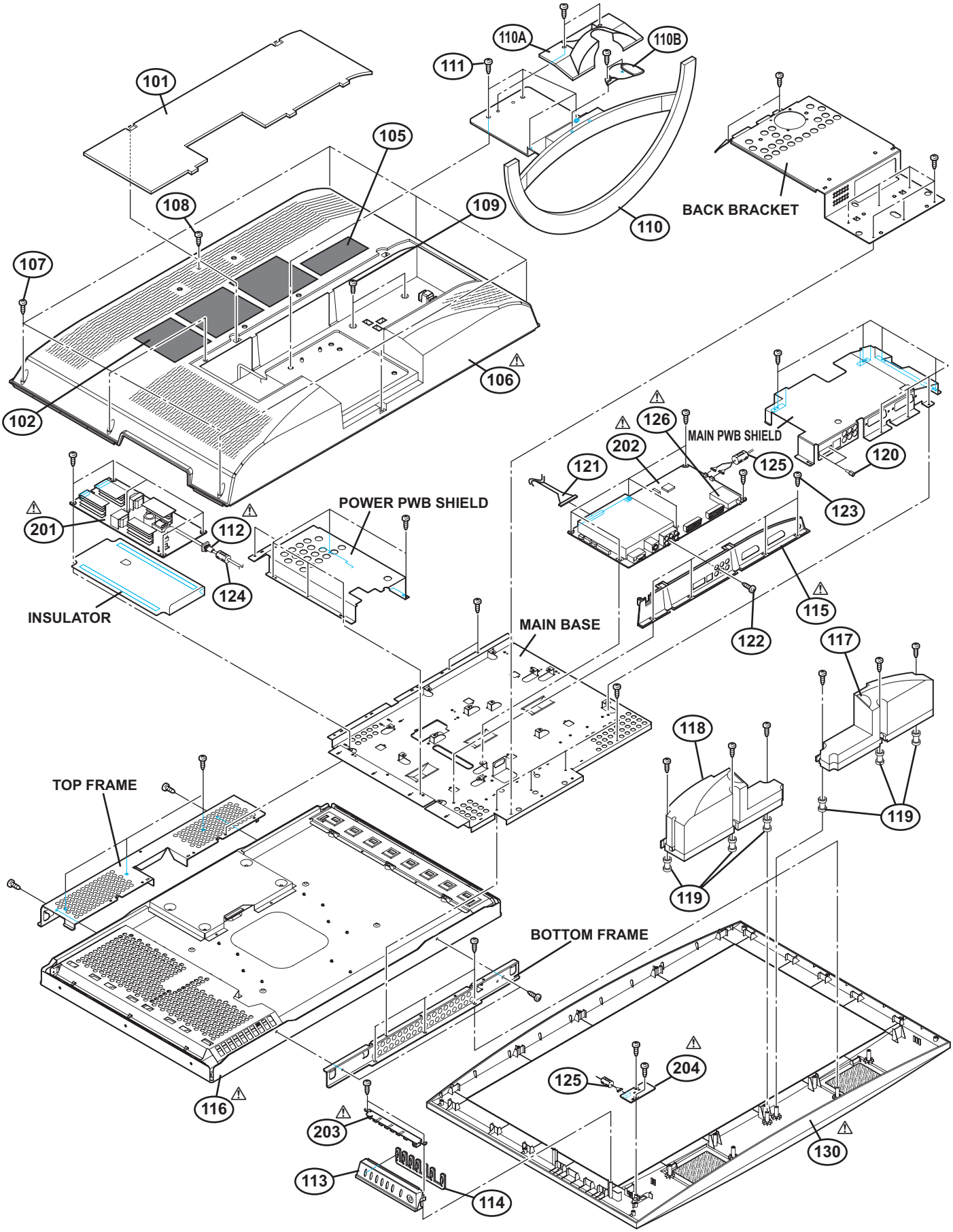
P.W.B ASS'Y	LT-32A60BU	LT-32A60SJ	LT-32A60SU
MAIN P.W.B	QAL0747-001	←	←
POWER P.W.B	QAL0748-001	←	←
KEY P.W.B	QAL0730-001	←	←
LED P.W.B	QAL0731-001	←	←
REMOTE CONTROL UNIT	RM-C1816S-1C	←	←

EXPLODED VIEW PARTS LIST

Please note that the TUNER is not included in the MAIN PWB (QAL0728-001).

⚠	Ref.No.	Part No.	Part Name	Description	Local
	101	LC12342-001A-U	JACK COVER		LT-32A60SJ
	101	LC12342-002A-U	JACK COVER		LT-32A60BU,LT-32A60SU
	102	LC30789-002B-U	WARNING LABEL		LT-32A60BU,LT-32A60SU
	105	LC41999-004A-U	CAUTION LABEL		
⚠	106	LC12396-001A-U	REAR COVER		LT-32A60BU
⚠	106	LC12396-002A-U	REAR COVER		LT-32A60SJ,LT-32A60SU
	107	QYSBSF4012ZA	TAP SCREW	M4 x 12mm(x8)	
	108	LC42063-001A	SCREW		
	109	LC42063-001A	SCREW	(x2)	
	110	GA10045-002A-U	STAND ASSY		LT-32A60BU
	110	GA10045-001A-U	STAND ASSY		LT-32A60SJ,LT-32A60SU
	110A	GA30080-002A-U	STAND COVER		LT-32A60BU
	110A	GA30080-001A-U	STAND COVER		LT-32A60SJ,LT-32A60SU
	110B	GA30081-002A-U	CABLE COVER		LT-32A60BU
	110B	GA30081-001A-U	CABLE COVER		LT-32A60SJ,LT-32A60SU
	111	QYSPSPD5016MA	SCREW	M5 x 16mm(x4)	
⚠	112	QMPN260-170-JC	POWER CORD(EK)	1.7m BLACK	LT-32A60SJ
⚠	112	QMPK300-170-JC	POWER CORD(EU)	1.7m BLACK	LT-32A60BU,LT-32A60SU
	113	LC21908-001A-U	KNOB BASE		LT-32A60BU
	113	LC21908-002A-U	KNOB BASE		LT-32A60SJ,LT-32A60SU
	114	LC33186-001A-U	CONTROL KNOB		LT-32A60SJ,LT-32A60SU
⚠	115	LC12387-001A-U	TERMINAL BASE		LT-32A60BU
⚠	115	LC12387-002A-U	TERMINAL BASE		LT-32A60SJ,LT-32A60SU
⚠	116	QLD0371-001-JUK	LCD PANEL UNIT		LT-32A60BU,LT-32A60SJ
⚠	116	QLD0371-001	LCD PANEL UNIT		LT-32A60SU
	117	LC42239-003A-C	SPEAKER ASSY(L)		
	118	LC42239-004A-C	SPEAKER ASSY(R)		
	119	LC40226-003A-H	SPACER	(x6)	
	120	QNB0036-001	HEX SCREW	(x2)	
	121	WJW0027-002A-E	DIGITAL(LVDS)CABLE		
	122	QYSBSF3010ZA	TAP SCREW	M3 x 10mm	
	123	LC42301-001A	SCREW	(x4)	
	124	QQR0491-002	FERRITE CORE		
	125	QQR0491-001	FERRITE CORE	(x2)	
⚠	126	QAU0439-001	TUNER		
⚠	130	LC12415-001A-U	FRONT PANEL ASSY		LT-32A60BU
⚠	130	LC12415-002A-U	FRONT PANEL ASSY		LT-32A60SJ,LT-32A60SU
⚠	201	QAL0748-001	POWER PWB		
⚠	202	QAL0747-001	MAIN PWB	Not included TUNER	
⚠	203	QAL0730-001	KEY PWB		
⚠	204	QAL0731-001	LED PWB		

EXPLODED VIEW



PRINTED WIRING BOARD PARTS LIST

MAIN P.W. BOARD ASS'Y (QAL0747-001)

⚠Ref No.	Part No.	Part Name	Description Local
U101	T1001-00081A	IC	
U301	T1001-00073A	IC	
U302	T1001-00064A	IC	
U303	ATF32-32A60SU	IC	(SERVICE)
U401	T1001-00084A	IC	
U402	T1001-00085A	IC	
U405	T1001-00075A	IC	
U501	T1001-00086A	IC	
U502	T1001-00063A	IC	
U601	T1001-00087A	IC	
U602	T1001-00088A	IC	
U603	T1001-00070A	IC	
U801	T0507-00002A	TRANSISTOR	
U802	T0507-00002A	TRANSISTOR	
Q101	T1001-00052A	IC	
Q102	T0507-00001A	TRANSISTOR	
Q103	T0507-00001A	TRANSISTOR	
Q104	T0507-00001A	TRANSISTOR	
Q105	T0507-00001A	TRANSISTOR	
Q106	T0507-00001A	TRANSISTOR	
Q108	T0507-00001A	TRANSISTOR	
Q202	T0507-00001A	TRANSISTOR	
Q203	T0507-00001A	TRANSISTOR	
Q301	T1001-00049A	IC	
Q303	T1001-00078A	IC	
Q304	T0507-00003A	TRANSISTOR	
Q305	T0507-00003A	TRANSISTOR	
Q306	T0507-00007A	TRANSISTOR	
Q307	T0507-00008A	TRANSISTOR	
Q308	T0507-00001A	TRANSISTOR	
Q309	T0507-00001A	TRANSISTOR	
Q311	T0507-00001A	TRANSISTOR	
Q315	T0507-00006A	TRANSISTOR	
Q316	T0507-00001A	TRANSISTOR	
Q317	T0507-00008A	TRANSISTOR	
Q403	T0507-00006A	TRANSISTOR	
Q501	T1001-00079A	IC	
Q502	T1001-00048A	IC	
Q503	T0507-00007A	TRANSISTOR	
Q601	T0507-00006A	TRANSISTOR	
Q602	T0507-00001A	TRANSISTOR	
Q603	T0507-00001A	TRANSISTOR	
Q604	T0507-00005A	TRANSISTOR	
Q701	T0507-00001A	TRANSISTOR	
Q702	T0507-00001A	TRANSISTOR	
Q703	T0507-00001A	TRANSISTOR	
Q801	T1001-00089A	IC	
Q802	T0507-00001A	TRANSISTOR	
Q804	T1001-00051A	IC	
Q805	T0507-00001A	TRANSISTOR	
Q806	T0507-00001A	TRANSISTOR	
D101	T0407-00004A	DIODE	
D205	T0408-00002A	Z DIODE	
D206	T0408-00002A	Z DIODE	
D207	T0408-00002A	Z DIODE	
D208	T0408-00002A	Z DIODE	
D209	T0408-00002A	Z DIODE	
D210	T0408-00002A	Z DIODE	
D301	T0407-00002A	DIODE	
D601	T0407-00002A	DIODE	
D602	T0407-00002A	DIODE	
D702	T0407-00002A	DIODE	
D704	T0407-00002A	DIODE	
D801	T0407-00003A	DIODE	
ZD101	T0408-00002A	Z DIODE	
ZD202	T0408-00002A	Z DIODE	
ZD203	T0408-00002A	Z DIODE	
ZD204	T0408-00002A	Z DIODE	
ZD206	T0408-00002A	Z DIODE	
ZD207	T0408-00002A	Z DIODE	
ZD208	T0408-00002A	Z DIODE	
ZD209	T0408-00002A	Z DIODE	
ZD210	T0408-00002A	Z DIODE	
ZD211	T0408-00002A	Z DIODE	
ZD212	T0408-00002A	Z DIODE	
ZD213	T0408-00002A	Z DIODE	
ZD214	T0408-00002A	Z DIODE	
ZD215	T0408-00002A	Z DIODE	
ZD216	T0408-00002A	Z DIODE	
ZD217	T0408-00002A	Z DIODE	
ZD218	T0408-00002A	Z DIODE	
ZD219	T0408-00002A	Z DIODE	
ZD221	T0408-00002A	Z DIODE	
ZD222	T0408-00002A	Z DIODE	
ZD225	T0408-00002A	Z DIODE	
ZD227	T0408-00002A	Z DIODE	
ZD230	T0408-00002A	Z DIODE	
ZD231	T0408-00002A	Z DIODE	
ZD232	T0408-00002A	Z DIODE	
ZD250	T0408-00002A	Z DIODE	
ZD251	T0408-00002A	Z DIODE	
ZD252	T0408-00002A	Z DIODE	
ZD253	T0408-00002A	Z DIODE	
ZD254	T0408-00002A	Z DIODE	
ZD255	T0408-00002A	Z DIODE	
ZD256	T0408-00002A	Z DIODE	
ZD257	T0408-00002A	Z DIODE	
ZD258	T0408-00002A	Z DIODE	
ZD259	T0408-00002A	Z DIODE	
ZD260	T0408-00002A	Z DIODE	
ZD261	T0408-00002A	Z DIODE	
ZD262	T0408-00002A	Z DIODE	
ZD263	T0408-00002A	Z DIODE	
ZD264	T0408-00002A	Z DIODE	
ZD265	T0408-00002A	Z DIODE	
ZD266	T0408-00002A	Z DIODE	
ZD267	T0408-00002A	Z DIODE	
ZD270	T0408-00002A	Z DIODE	
ZD271	T0408-00002A	Z DIODE	
ZD702	T0407-00005A	Z DIODE	
C101	T2203-DC104E	C CAPACITOR	0.1uF 25V K
C102	T2203-FC104E	C CAPACITOR	0.1uF 50V Z
C103	T2203-BC106E	C CAPACITOR	10uF 10V Z
C105	T2203-FC104E	C CAPACITOR	0.1uF 50V Z
C106	T2203-BC106E	C CAPACITOR	10uF 10V Z
C107	T2203-BC106E	C CAPACITOR	10uF 10V Z
C109	T2203-BC106E	C CAPACITOR	10uF 10V Z
C110	T2203-BC106E	C CAPACITOR	10uF 10V Z
C112	T2203-BC106E	C CAPACITOR	10uF 10V Z
C113	T2203-BC106E	C CAPACITOR	10uF 10V Z
C201	T2203-FC102D	C CAPACITOR	1000pF 50V K
C202	T2203-FC473D	C CAPACITOR	0.047uF 50V K
C203	T2203-FC473D	C CAPACITOR	0.047uF 50V K
C204	T2203-FC473D	C CAPACITOR	0.047uF 50V K
C205	T2203-FC473D	C CAPACITOR	0.047uF 50V K
C206	T2203-FC473D	C CAPACITOR	0.047uF 50V K
C207	T2203-FC473D	C CAPACITOR	0.047uF 50V K
C208	T2203-FC473D	C CAPACITOR	0.047uF 50V K
C209	T2203-FC473D	C CAPACITOR	0.047uF 50V K
C210	T2203-FC102D	C CAPACITOR	1000pF 50V K
C211	T2203-FC473D	C CAPACITOR	0.047uF 50V K
C213	T2203-FC100D	C CAPACITOR	10pF 50V K
C214	T2203-FC100D	C CAPACITOR	10pF 50V K
C215	T2203-FC100D	C CAPACITOR	10pF 50V K
C216	T2203-FC471D	C CAPACITOR	470pF 50V K
C217	T2203-FC103D	C CAPACITOR	0.01uF 50V K
C218	T2203-FC471D	C CAPACITOR	470pF 50V K
C219	T2203-FC103D	C CAPACITOR	0.01uF 50V K
C220	T2203-FC471D	C CAPACITOR	470pF 50V K
C221	T2203-FC103D	C CAPACITOR	0.01uF 50V K
C222	T2203-FC471D	C CAPACITOR	470pF 50V K
C223	T2203-FC103D	C CAPACITOR	0.01uF 50V K
C226	T2203-FC471D	C CAPACITOR	470pF 50V K
C227	T2203-FC473D	C CAPACITOR	0.047uF 50V K
C228	T2203-FC473D	C CAPACITOR	0.047uF 50V K
C229	T2203-FC473D	C CAPACITOR	0.047uF 50V K
C230	T2203-FC471D	C CAPACITOR	470pF 50V K
C231	T2203-FC471D	C CAPACITOR	470pF 50V K
C232	T2203-FC471D	C CAPACITOR	470pF 50V K
C233	T2203-FC471D	C CAPACITOR	470pF 50V K
C234	T2203-FC471D	C CAPACITOR	470pF 50V K
C235	T2203-FC471D	C CAPACITOR	470pF 50V K
C236	T2203-FC100D	C CAPACITOR	10pF 50V K
C238	T2203-FC100D	C CAPACITOR	10pF 50V K
C242	T2203-FC331D	C CAPACITOR	330pF 50V K
C243	T2203-FC331D	C CAPACITOR	330pF 50V K
C244	T2203-FC331D	C CAPACITOR	330pF 50V K
C248	T2203-FC334D	C CAPACITOR	0.33uF 16V Z
C249	T2203-FC334D	C CAPACITOR	0.33uF 16V Z
C301	T2203-DC104E	C CAPACITOR	0.1uF 25V K
C302	T2203-DC104E	C CAPACITOR	0.1uF 25V K
C303	T2203-DC104E	C CAPACITOR	0.1uF 25V K
C304	T2203-DC104E	C CAPACITOR	0.1uF 25V K
C305	T2203-DC104E	C CAPACITOR	0.1uF 25V K
C307	T2203-FC103D	C CAPACITOR	0.01uF 50V K

⚠Ref No.	Part No.	Part Name	Description	Local
C308	T2203-FC224D	C CAPACITOR	0.22uF 50V K	
C309	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C310	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C311	T2203-FC330D	C CAPACITOR	33pF 50V K	
C312	T2203-FC101D	C CAPACITOR	0.01uF 50V K	
C313	T2203-FC101D	C CAPACITOR	0.01uF 50V K	
C314	T2203-FC101D	C CAPACITOR	0.01uF 50V K	
C316	T2203-FC330D	C CAPACITOR	33pF 50V K	
C317	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C318	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C319	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C321	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C402	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C403	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C404	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C405	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C406	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C407	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C409	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C411	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C412	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C413	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C414	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C415	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C416	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C417	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C419	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C420	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C421	T2203-FC152D	C CAPACITOR	1500pF 50V K	
C422	T2203-FC152D	C CAPACITOR	1500pF 50V K	
C423	T2203-FC152D	C CAPACITOR	1500pF 50V K	
C424	T2203-FC100D	C CAPACITOR	10pF 50V K	
C425	T2203-FC220D	C CAPACITOR	22pF 50V K	
C426	T2203-FC220D	C CAPACITOR	22pF 50V K	
C427	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C428	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C429	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C430	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C431	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C432	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C433	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C434	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C435	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C436	T2203-FC100D	C CAPACITOR	10pF 50V K	
C438	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C439	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C440	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C441	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C442	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C443	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C444	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C445	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C446	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C447	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C451	T2203-FC103D	C CAPACITOR	0.01uF 50V K	
C452	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C453	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C454	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C455	T2203-FC471D	C CAPACITOR	470pF 50V K	
C456	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C457	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C458	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C459	T2203-FC150D	C CAPACITOR	15pF 50V K	
C460	T2203-FC150D	C CAPACITOR	15pF 50V K	
C461	T2203-FC152D	C CAPACITOR	1500pF 50V K	
C501	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C502	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C503	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C504	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C505	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C506	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C507	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C508	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C509	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C510	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C511	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C512	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C513	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C514	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C515	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C516	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C517	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C518	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C519	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C520	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C524	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C525	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C526	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C527	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C528	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C529	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C530	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C531	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C532	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C533	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C534	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C535	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C536	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C537	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C538	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C539	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C540	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C541	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C543	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C544	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C545	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C546	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C548	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C549	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C550	T2203-FC100D	C CAPACITOR	10pF 50V K	
C552	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C553	T2203-FC330D	C CAPACITOR	33pF 50V K	
C554	T2203-FC330D	C CAPACITOR	33pF 50V K	
C555	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C556	T2203-FC102D	C CAPACITOR	1000pF 50V K	
C557	T2203-FC100D	C CAPACITOR	10pF 50V K	
C559	T2203-CC105D	C CAPACITOR	1uF 16V Z	
C601	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C604	T2203-FC332D	C CAPACITOR	3300pF 50V K	
C605	T2203-FC332D	C CAPACITOR	3300pF 50V K	
C606	T2203-FC060D	C CAPACITOR	6pF 50V K	
C607	T2203-FC060D	C CAPACITOR	6pF 50V K	
C608	T2203-FC470D	C CAPACITOR	47pF 50V K	
C610	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C611	T2203-FC470D	C CAPACITOR	47pF 50V K	
C612	2007-000070	C RESISTOR	0Ω 1/16W J	
C614	T2203-FC472D	C CAPACITOR	4700pF 50V K	
C615	T2203-FC331D	C CAPACITOR	330pF 50V K	
C616	T2203-FC331D	C CAPACITOR	330pF 50V K	
C617	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C618	T2203-FC103D	C CAPACITOR	0.01uF 50V K	
C619	T2203-FC103D	C CAPACITOR	0.01uF 50V K	
C620	T2203-FC103D	C CAPACITOR	0.01uF 50V K	
C621	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C623	T2203-FC392D	C CAPACITOR	3900pF 50V K	
C624	T2203-FC392D	C CAPACITOR	3900pF 50V K	
C625	T2203-FC102D	C CAPACITOR	1000pF 50V K	
C626	T2203-FC331D	C CAPACITOR	330pF 50V K	
C627	T2203-FC331D	C CAPACITOR	330pF 50V K	
C632	T2203-FC331D	C CAPACITOR	330pF 50V K	
C633	T2203-FC331D	C CAPACITOR	330pF 50V K	
C634	T2203-CC105D	C CAPACITOR	1uF 16V Z	
C635	T2203-CC105D	C CAPACITOR	1uF 16V Z	
C636	T2203-FC470D	C CAPACITOR	47pF 50V K	
C638	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C639	T2203-FC682D	C CAPACITOR	6800pF 50V K	
C640	T2203-FC682D	C CAPACITOR	6800pF 50V K	
C701	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C702	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C703	T2203-FC103D	C CAPACITOR	0.01uF 50V K	
C707	T2203-FC104D	C CAPACITOR	0.1uF 50V K	
C710	T2203-FC104D	C CAPACITOR	0.1uF 50V K	
C712	T2203-FC471D	C CAPACITOR	470pF 50V K	
C714	T2203-FC103D	C CAPACITOR	0.01uF 50V K	
C715	T2203-FC103D	C CAPACITOR	0.01uF 50V K	
C801	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C802	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C805	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C806	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C807	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C820	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
C821	T2203-DC104E	C CAPACITOR	0.1uF 25V K	
R101	2007-000076	C RESISTOR	330Ω 1/16W J	
R102	2007-000076	C RESISTOR	330Ω 1/16W J	
R104	2007-000076	C RESISTOR	330Ω 1/16W J	
R107	2007-000075	C RESISTOR	220Ω 1/16W J	
R108	2007-000070	C RESISTOR	0Ω 1/16W J	
R109	2007-000102	C RESISTOR	100KΩ 1/16W J	
R110	2007-000102	C RESISTOR	100KΩ 1/16W J	
R114	2007-000102	C RESISTOR	100KΩ 1/16W J	
R115	2007-000076	C RESISTOR	330Ω 1/16W J	
R118	2007-001167	C RESISTOR	75Ω 1/16W J	
R119	2007-000076	C RESISTOR	330Ω 1/16W J	
R121	2007-000102	C RESISTOR	100KΩ 1/16W J	
R123	2007-000076	C RESISTOR	330Ω 1/16W J	
R124	2007-000075	C RESISTOR	220Ω 1/16W J	
R126	2007-000078	C RESISTOR	1KΩ 1/16W J	

⚠Ref No.	Part No.	Part Name	Description	Local
R127	2007-000090	C RESISTOR	10KΩ 1/16W J	
R128	2007-000090	C RESISTOR	10KΩ 1/16W J	
R129	2007-000090	C RESISTOR	10KΩ 1/16W J	
R130	2007-000078	C RESISTOR	1KΩ 1/16W J	
R131	2007-000090	C RESISTOR	10KΩ 1/16W J	
R132	2007-000097	C RESISTOR	47KΩ 1/16W J	
R133	2007-000075	C RESISTOR	220Ω 1/16W J	
R134	2007-000090	C RESISTOR	10KΩ 1/16W J	
R135	2007-000078	C RESISTOR	1KΩ 1/16W J	
R136	2007-000129	C RESISTOR	27KΩ 1/16W J	
R137	2007-000123	C RESISTOR	1.5KΩ 1/16W J	
R138	2007-000090	C RESISTOR	10KΩ 1/16W J	
R142	2007-000090	C RESISTOR	10KΩ 1/16W J	
R143	2007-000129	C RESISTOR	27KΩ 1/16W J	
R210	2007-000643	C RESISTOR	270Ω 1/16W J	
R211	2007-000074	C RESISTOR	100Ω 1/16W J	
R214	2007-000078	C RESISTOR	1KΩ 1/16W J	
R215	2007-000078	C RESISTOR	1KΩ 1/16W J	
R216	2007-000078	C RESISTOR	1KΩ 1/16W J	
R217	2007-000078	C RESISTOR	1KΩ 1/16W J	
R218	2007-000078	C RESISTOR	1KΩ 1/16W J	
R219	2007-000078	C RESISTOR	1KΩ 1/16W J	
R220	2007-000078	C RESISTOR	1KΩ 1/16W J	
R223	2007-000077	C RESISTOR	470Ω 1/16W J	
R224	2007-000113	C RESISTOR	33Ω 1/16W J	
R225	2007-001167	C RESISTOR	75Ω 1/16W J	
R226	2007-000113	C RESISTOR	33Ω 1/16W J	
R227	2007-001167	C RESISTOR	75Ω 1/16W J	
R228	2007-000113	C RESISTOR	33Ω 1/16W J	
R229	2007-001167	C RESISTOR	75Ω 1/16W J	
R230	2007-000113	C RESISTOR	33Ω 1/16W J	
R231	2007-000113	C RESISTOR	33Ω 1/16W J	
R232	2007-000077	C RESISTOR	470Ω 1/16W J	
R233	2007-000113	C RESISTOR	33Ω 1/16W J	
R235	2007-001167	C RESISTOR	75Ω 1/16W J	
R236	2007-001167	C RESISTOR	75Ω 1/16W J	
R237	2007-000115	C RESISTOR	82Ω 1/16W J	
R238	2007-000115	C RESISTOR	82Ω 1/16W J	
R239	2007-000115	C RESISTOR	82Ω 1/16W J	
R240	2007-001167	C RESISTOR	75Ω 1/16W J	
R241	2007-001167	C RESISTOR	75Ω 1/16W J	
R242	2007-001167	C RESISTOR	75Ω 1/16W J	
R243	2007-000078	C RESISTOR	1KΩ 1/16W J	
R244	2007-000078	C RESISTOR	1KΩ 1/16W J	
R245	2007-001167	C RESISTOR	75Ω 1/16W J	
R246	2007-001167	C RESISTOR	75Ω 1/16W J	
R247	2007-001167	C RESISTOR	75Ω 1/16W J	
R248	2007-000090	C RESISTOR	10KΩ 1/16W J	
R249	2007-000090	C RESISTOR	10KΩ 1/16W J	
R255	2007-000074	C RESISTOR	100Ω 1/16W J	
R256	2007-001167	C RESISTOR	75Ω 1/16W J	
R260	2007-001167	C RESISTOR	75Ω 1/16W J	
R261	2007-000129	C RESISTOR	27KΩ 1/16W J	
R262	2007-001167	C RESISTOR	75Ω 1/16W J	
R263	2007-001167	C RESISTOR	75Ω 1/16W J	
R264	2007-001167	C RESISTOR	75Ω 1/16W J	
R267	2007-001167	C RESISTOR	75Ω 1/16W J	
R271	2007-000074	C RESISTOR	100Ω 1/16W J	
R272	2007-000074	C RESISTOR	100Ω 1/16W J	
R273	2007-000643	C RESISTOR	270Ω 1/16W J	
R274	2007-000074	C RESISTOR	100Ω 1/16W J	
R275	2007-000070	C RESISTOR	0Ω 1/16W J	
R277	2007-000070	C RESISTOR	0Ω 1/16W J	
R278	2007-000078	C RESISTOR	1KΩ 1/16W J	
R279	2007-000078	C RESISTOR	1KΩ 1/16W J	
R280	2007-000078	C RESISTOR	1KΩ 1/16W J	
R281	2007-000115	C RESISTOR	82Ω 1/16W J	
R282	2007-000115	C RESISTOR	82Ω 1/16W J	
R283	2007-000115	C RESISTOR	82Ω 1/16W J	
R285	2007-001167	C RESISTOR	75Ω 1/16W J	
R286	2007-000129	C RESISTOR	27KΩ 1/16W J	
R287	2007-000882	C RESISTOR	4.7Ω 1/16W J	
R288	2007-001167	C RESISTOR	75Ω 1/16W J	
R289	2007-001167	C RESISTOR	75Ω 1/16W J	
R290	2007-000074	C RESISTOR	100Ω 1/16W J	
R291	2007-000074	C RESISTOR	100Ω 1/16W J	
R292	2007-000078	C RESISTOR	1KΩ 1/16W J	
R294	2007-000882	C RESISTOR	4.7Ω 1/16W J	
R295	2007-001167	C RESISTOR	75Ω 1/16W J	
R296	2007-000078	C RESISTOR	1KΩ 1/16W J	
R299	2007-000113	C RESISTOR	33Ω 1/16W J	
R304	2007-000074	C RESISTOR	100Ω 1/16W J	
R305	2007-000074	C RESISTOR	100Ω 1/16W J	
R307	2007-000074	C RESISTOR	100Ω 1/16W J	
R308	2007-000074	C RESISTOR	100Ω 1/16W J	
R309	2007-000074	C RESISTOR	100Ω 1/16W J	
R310	2007-000090	C RESISTOR	10KΩ 1/16W J	
R311	2007-000074	C RESISTOR	100Ω 1/16W J	
R313	2007-000074	C RESISTOR	100Ω 1/16W J	
R314	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R315	2007-000309	C RESISTOR	10Ω 1/16W J	
R316	2007-000309	C RESISTOR	10Ω 1/16W J	
R317	2007-000309	C RESISTOR	10Ω 1/16W J	
R318	2007-000081	C RESISTOR	2.7KΩ 1/16W J	
R319	2007-000309	C RESISTOR	10Ω 1/16W J	
R320	2007-000074	C RESISTOR	100Ω 1/16W J	
R321	2007-000081	C RESISTOR	2.7KΩ 1/16W J	
R322	2007-000074	C RESISTOR	100Ω 1/16W J	
R327	2007-000074	C RESISTOR	100Ω 1/16W J	
R328	2007-000074	C RESISTOR	100Ω 1/16W J	
R329	2007-001167	C RESISTOR	75Ω 1/16W J	
R330	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R331	2007-000074	C RESISTOR	100Ω 1/16W J	
R332	2007-000071	C RESISTOR	22Ω 1/16W J	
R333	2007-000071	C RESISTOR	22Ω 1/16W J	
R335	2007-000094	C RESISTOR	22KΩ 1/16W J	
R336	2007-000097	C RESISTOR	47KΩ 1/16W J	
R337	2007-000082	C RESISTOR	3.3KΩ 1/16W J	
R338	2007-000082	C RESISTOR	3.3KΩ 1/16W J	
R339	2007-000082	C RESISTOR	3.3KΩ 1/16W J	
R340	2007-000071	C RESISTOR	22Ω 1/16W J	
R341	2007-000074	C RESISTOR	100Ω 1/16W J	
R342	2007-000309	C RESISTOR	10Ω 1/16W J	
R343	2007-000078	C RESISTOR	1KΩ 1/16W J	
R344	2007-000074	C RESISTOR	100Ω 1/16W J	
R345	2007-000074	C RESISTOR	100Ω 1/16W J	
R346	2007-000074	C RESISTOR	100Ω 1/16W J	
R347	2007-000074	C RESISTOR	100Ω 1/16W J	
R348	2007-000074	C RESISTOR	100Ω 1/16W J	
R349	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R350	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R351	2007-000113	C RESISTOR	33Ω 1/16W J	
R352	2007-000113	C RESISTOR	33Ω 1/16W J	
R353	2007-000113	C RESISTOR	33Ω 1/16W J	
R354	2007-000113	C RESISTOR	33Ω 1/16W J	
R355	2007-000074	C RESISTOR	100Ω 1/16W J	
R356	2007-000074	C RESISTOR	100Ω 1/16W J	
R357	2007-000082	C RESISTOR	3.3KΩ 1/16W J	
R358	2007-000074	C RESISTOR	100Ω 1/16W J	
R359	2007-000074	C RESISTOR	100Ω 1/16W J	
R360	2007-000082	C RESISTOR	3.3KΩ 1/16W J	
R361	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R363	2007-000120	C RESISTOR	680Ω 1/16W J	
R364	2007-000070	C RESISTOR	0Ω 1/16W J	
R365	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R367	2007-000074	C RESISTOR	100Ω 1/16W J	
R368	2007-000097	C RESISTOR	47KΩ 1/16W J	
R370	2007-000090	C RESISTOR	10KΩ 1/16W J	
R371	2007-000076	C RESISTOR	330Ω 1/16W J	
R373	2007-000074	C RESISTOR	100Ω 1/16W J	
R374	2007-000094	C RESISTOR	22KΩ 1/16W J	
R375	2007-000090	C RESISTOR	10KΩ 1/16W J	
R376	2007-000074	C RESISTOR	100Ω 1/16W J	
R377	2007-000070	C RESISTOR	0Ω 1/16W J	
R378	2007-000078	C RESISTOR	1KΩ 1/16W J	
R380	2007-000090	C RESISTOR	10KΩ 1/16W J	
R382	2007-000074	C RESISTOR	100Ω 1/16W J	
R383	2007-000119	C RESISTOR	560Ω 1/16W J	
R385	2007-000074	C RESISTOR	100Ω 1/16W J	
R388	2007-000070	C RESISTOR	0Ω 1/16W J	
R390	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R391	2007-000070	C RESISTOR	0Ω 1/16W J	
R392	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R393	2007-000074	C RESISTOR	100Ω 1/16W J	
R394	2007-000078	C RESISTOR	1KΩ 1/16W J	
R395	2007-000070	C RESISTOR	0Ω 1/16W J	
R396	2007-000076	C RESISTOR	330Ω 1/16W J	
R397	2007-000076	C RESISTOR	330Ω 1/16W J	
R411	2007-000077	C RESISTOR	470Ω 1/16W J	
R412	2007-001134	C RESISTOR	68Ω 1/16W J	
R413	2007-000074	C RESISTOR	100Ω 1/16W J	
R414	2007-000113	C RESISTOR	33Ω 1/16W J	
R415	2007-000120	C RESISTOR	680Ω 1/16W J	
R416	2007-000071	C RESISTOR	22Ω 1/16W J	
R417	2007-000071	C RESISTOR	22Ω 1/16W J	
R418	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R419	2007-000070	C RESISTOR	0Ω 1/16W J	
R427	2007-000109	C RESISTOR	1MΩ 1/16W J	
R429	2007-000113	C RESISTOR	33Ω 1/16W J	
R432	2007-000113	C RESISTOR	33Ω 1/16W J	
R434	2007-000113	C RESISTOR	33Ω 1/16W J	
R436	2007-000113	C RESISTOR	33Ω 1/16W J	
R438	2007-000113	C RESISTOR	33Ω 1/16W J	
R440	2007-000113	C RESISTOR	33Ω 1/16W J	
R442	2007-000113	C RESISTOR	33Ω 1/16W J	
R443	2007-000113	C RESISTOR	33Ω 1/16W J	
R444	2007-000113	C RESISTOR	33Ω 1/16W J	
R445	2007-000113	C RESISTOR	33Ω 1/16W J	

⚠Ref No.	Part No.	Part Name	Description	Local
R446	2007-000113	C RESISTOR	33Ω 1/16W J	
R447	2007-000113	C RESISTOR	33Ω 1/16W J	
R448	2007-000113	C RESISTOR	33Ω 1/16W J	
R449	2007-000113	C RESISTOR	33Ω 1/16W J	
R456	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R457	2007-001167	C RESISTOR	75Ω 1/16W J	
R458	2007-001167	C RESISTOR	75Ω 1/16W J	
R459	2007-001167	C RESISTOR	75Ω 1/16W J	
R460	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R461	2007-000107	C RESISTOR	470KΩ 1/16W J	
R462	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R501	2007-000090	C RESISTOR	10KΩ 1/16W J	
R504	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R505	2007-000102	C RESISTOR	100KΩ 1/16W J	
R509	T2901-HC011A	CHIP BEAD	30Ω	
R510	T2901-HC011A	CHIP BEAD	30Ω	
R511	T2901-HC011A	CHIP BEAD	30Ω	
R515	T2901-HC011A	CHIP BEAD	30Ω	
R516	T2901-HC011A	CHIP BEAD	30Ω	
R517	T2901-HC011A	CHIP BEAD	30Ω	
R518	T2901-HC011A	CHIP BEAD	30Ω	
R519	T2901-HC011A	CHIP BEAD	30Ω	
R529	2007-000070	C RESISTOR	0Ω 1/16W J	
R541	T2901-HC011A	CHIP BEAD	30Ω	
R542	T2901-HC011A	CHIP BEAD	30Ω	
R543	T2901-HC011A	CHIP BEAD	30Ω	
R544	2007-000071	C RESISTOR	22Ω 1/16W J	
R546	T2901-HC011A	CHIP BEAD	30Ω	
R548	T2901-HC011A	CHIP BEAD	30Ω	
R550	T2901-HC011A	CHIP BEAD	30Ω	
R560	T2901-HC011A	CHIP BEAD	30Ω	
R561	T2901-HC011A	CHIP BEAD	30Ω	
R562	T2901-HC011A	CHIP BEAD	30Ω	
R563	T2901-HC011A	CHIP BEAD	30Ω	
R565	T2901-HC011A	CHIP BEAD	30Ω	
R566	2007-000309	C RESISTOR	10Ω 1/16W J	
R567	T2901-HC011A	CHIP BEAD	30Ω	
R568	2007-000309	C RESISTOR	10Ω 1/16W J	
R571	T2901-HC011A	CHIP BEAD	30Ω	
R572	T2901-HC011A	CHIP BEAD	30Ω	
R573	T2901-HC011A	CHIP BEAD	30Ω	
R574	2007-000074	C RESISTOR	100Ω 1/16W J	
R576	2007-000113	C RESISTOR	33Ω 1/16W J	
R577	T2901-HC011A	CHIP BEAD	30Ω	
R579	T2901-HC011A	CHIP BEAD	30Ω	
R580	2007-000113	C RESISTOR	33Ω 1/16W J	
R581	2007-000113	C RESISTOR	33Ω 1/16W J	
R582	T2901-HC011A	CHIP BEAD	30Ω	
R583	T2901-HC011A	CHIP BEAD	30Ω	
R584	T2901-HC011A	CHIP BEAD	30Ω	
R585	T2901-HC011A	CHIP BEAD	30Ω	
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R587	T2901-HC011A	CHIP BEAD	30Ω	
R588	T2901-HC011A	CHIP BEAD	30Ω	
R589	2007-000070	C RESISTOR	0Ω 1/16W J	
R591	T2901-HC011A	CHIP BEAD	30Ω	
R592	T2901-HC011A	CHIP BEAD	30Ω	
R593	2007-000078	C RESISTOR	1KΩ 1/16W J	
R594	2007-000078	C RESISTOR	1KΩ 1/16W J	
R595	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R596	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R597	2007-000118	C RESISTOR	390Ω 1/16W J	
R601	2007-000078	C RESISTOR	1KΩ 1/16W J	
R602	2007-000100	C RESISTOR	68KΩ 1/16W J	
R603	2007-000402	C RESISTOR	150Ω 1/16W J	
R604	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R605	2007-000078	C RESISTOR	1KΩ 1/16W J	
R606	2007-000097	C RESISTOR	47KΩ 1/16W J	
R607	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R608	2007-000096	C RESISTOR	30KΩ 1/16W J	
R609	2007-000078	C RESISTOR	1KΩ 1/16W J	
R610	2007-000096	C RESISTOR	30KΩ 1/16W J	
R611	2007-000078	C RESISTOR	1KΩ 1/16W J	
R612	2007-000097	C RESISTOR	47KΩ 1/16W J	
R613	2007-000074	C RESISTOR	100Ω 1/16W J	
R614	2007-000074	C RESISTOR	100Ω 1/16W J	
R615	2007-000074	C RESISTOR	100Ω 1/16W J	
R616	2007-000074	C RESISTOR	100Ω 1/16W J	
R617	2007-000074	C RESISTOR	100Ω 1/16W J	
R618	2007-000074	C RESISTOR	100Ω 1/16W J	
R619	2007-000070	C RESISTOR	0Ω 1/16W J	
R620	2007-000070	C RESISTOR	0Ω 1/16W J	
R621	2007-000070	C RESISTOR	0Ω 1/16W J	
R622	2007-000070	C RESISTOR	0Ω 1/16W J	
R623	2007-000090	C RESISTOR	10KΩ 1/16W J	
R624	2007-000093	C RESISTOR	20KΩ 1/16W J	
R625	2007-000078	C RESISTOR	1KΩ 1/16W J	
R629	2007-000074	C RESISTOR	100Ω 1/16W J	
R630	2007-000093	C RESISTOR	20KΩ 1/16W J	
R631	2007-000090	C RESISTOR	10KΩ 1/16W J	
R632	2007-000309	C RESISTOR	10Ω 1/16W J	
R633	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R701	2007-000074	C RESISTOR	100Ω 1/16W J	
R702	2007-000074	C RESISTOR	100Ω 1/16W J	
R703	2007-000074	C RESISTOR	100Ω 1/16W J	
R704	2007-000119	C RESISTOR	560Ω 1/16W J	
R705	2007-000121	C RESISTOR	820Ω 1/16W J	
R707	2007-000309	C RESISTOR	10Ω 1/16W J	
R708	2007-000074	C RESISTOR	100Ω 1/16W J	
R709	2007-000309	C RESISTOR	10Ω 1/16W J	
R710	2007-000078	C RESISTOR	1KΩ 1/16W J	
R711	2007-000102	C RESISTOR	100KΩ 1/16W J	
R712	2007-000102	C RESISTOR	100KΩ 1/16W J	
R713	2007-000094	C RESISTOR	22KΩ 1/16W J	
R801	2007-000090	C RESISTOR	10KΩ 1/16W J	
R802	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R803	2007-000643	C RESISTOR	270Ω 1/16W J	
R804	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R805	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R806	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R810	2007-000070	C RESISTOR	0Ω 1/16W J	
L201	T2901-HC002A	CHIP BEAD	80Ω	
L202	T2901-HC002A	CHIP BEAD	80Ω	
L203	T2901-HC002A	CHIP BEAD	80Ω	
L204	T2901-HC002A	CHIP BEAD	80Ω	
L205	T2901-HC002A	CHIP BEAD	80Ω	
L206	T2901-HC002A	CHIP BEAD	80Ω	
L207	T2901-HC002A	CHIP BEAD	80Ω	
L208	T2901-HC002A	CHIP BEAD	80Ω	
L209	T2901-HC002A	CHIP BEAD	80Ω	
L210	T2901-HC002A	CHIP BEAD	80Ω	
L211	T2901-HC002A	CHIP BEAD	80Ω	
L212	T2901-HC002A	CHIP BEAD	80Ω	
L213	T2901-HC002A	CHIP BEAD	80Ω	
L214	T2901-HC002A	CHIP BEAD	80Ω	
L215	T2901-HC002A	CHIP BEAD	80Ω	
L216	T2901-HC002A	CHIP BEAD	80Ω	
L217	T2901-HC002A	CHIP BEAD	80Ω	
L218	T2901-HC002A	CHIP BEAD	80Ω	
L219	T2901-HC002A	CHIP BEAD	80Ω	
L220	T2901-HC002A	CHIP BEAD	80Ω	
L221	T2901-HC002A	CHIP BEAD	80Ω	
L301	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
L302	T2901-HC002A	CHIP BEAD	80Ω	
L303	T2901-HC002A	CHIP BEAD	80Ω	
L304	T2901-HC002A	CHIP BEAD	80Ω	
L305	T2901-HC002A	CHIP BEAD	80Ω	
L306	T2901-JC004A	CHIP BEAD	500Ω	
L317	T2703-IC002A	COIL-CHIP	10uH	
L401	T2901-JC004A	CHIP BEAD	500Ω	
L402	T2901-JC004A	CHIP BEAD	500Ω	
L404	T2901-JC004A	CHIP BEAD	500Ω	
L405	T2901-JC004A	CHIP BEAD	500Ω	
L406	T2901-JC004A	CHIP BEAD	500Ω	
L408	T2901-JC004A	CHIP BEAD	500Ω	
L501	T2901-JC004A	CHIP BEAD	500Ω	
L502	T2901-JC004A	CHIP BEAD	500Ω	
L504	T2901-JC004A	CHIP BEAD	500Ω	
L505	T2901-JC004A	CHIP BEAD	500Ω	
L506	T2901-JC004A	CHIP BEAD	500Ω	
L507	T2901-JC004A	CHIP BEAD	500Ω	
L509	T2901-JC004A	CHIP BEAD	500Ω	
L510	T2901-JC004A	CHIP BEAD	500Ω	
L511	T2901-JC004A	CHIP BEAD	500Ω	
L512	T2901-JC004A	CHIP BEAD	500Ω	
L513	T2901-JC004A	CHIP BEAD	500Ω	
L514	T2901-JC004A	CHIP BEAD	500Ω	
L515	T2901-JC004A	CHIP BEAD	500Ω	
L516	T2901-JC004A	CHIP BEAD	500Ω	
L517	T2901-JC004A	CHIP BEAD	500Ω	
L5VA	T2901-JC005A	CHIP BEAD	80Ω	
L5VB	T2901-JC005A	CHIP BEAD	80Ω	
L5VC	T2901-JC005A	CHIP BEAD	80Ω	
L601	T2703-JC011A	COIL-CHIP	10uH	
L602	T2703-JC011A	COIL-CHIP	10uH	
L603	T2901-JC004A	CHIP BEAD	500Ω	
L606	T2901-JC004A	CHIP BEAD	500Ω	
L608	T2901-JC004A	CHIP BEAD	500Ω	
L701	T2703-IC002A	COIL-CHIP	10uH	
L703	T2703-KC008A	COIL-SMD	680uH	
L705	T2703-KC007A	COIL-SMD	470uH	
L801	T2901-JC005A	CHIP BEAD	80Ω	
L802	T2901-JC005A	CHIP BEAD	80Ω	
L803	T2901-JC005A	CHIP BEAD	80Ω	
L804	T2901-JC005A	CHIP BEAD	80Ω	
L805	T2901-JC005A	CHIP BEAD	80Ω	
L806	T2901-JC005A	CHIP BEAD	80Ω	

⚠Ref No.	Part No.	Part Name	Description	Local
L807	T2901-JC005A	CHIP BEAD	80Ω	
L808	T2901-JC005A	CHIP BEAD	80Ω	
L809	T2901-JC005A	CHIP BEAD	80Ω	
L810	T2901-JC005A	CHIP BEAD	80Ω	
L812	T2901-JC005A	CHIP BEAD	80Ω	
L813	T2901-JC005A	CHIP BEAD	80Ω	
L814	T2703-LC010A	COIL-SMD	100uH	
L815	T2901-JC005A	CHIP BEAD	80Ω	
L816	T2901-JC005A	CHIP BEAD	80Ω	
L820	T2901-JC005A	CHIP BEAD	80Ω	
L821	T2901-JC005A	CHIP BEAD	80Ω	
L822	T2901-JC005A	CHIP BEAD	80Ω	
L823	T2901-JC005A	CHIP BEAD	80Ω	
L830	2007-000078	C RESISTOR	1KΩ 1/16W J	
RN301	T2901-JC010B	BEAD ARRAY	120Ω	
RN302	T2901-JC010B	BEAD ARRAY	120Ω	
RN303	T2901-JC010B	BEAD ARRAY	120Ω	
RN304	T2901-JC010B	BEAD ARRAY	120Ω	
RN305	T2901-JC010B	BEAD ARRAY	120Ω	
RN306	T2901-JC010B	BEAD ARRAY	120Ω	
RN307	T2901-JC010B	BEAD ARRAY	120Ω	
RN308	T2007-HC472J	RC ARRAY	4.7KΩ 1/16W J	
RN309	T2901-JC010B	BEAD ARRAY	120Ω	
RN310	T2007-HC472J	RC ARRAY	4.7KΩ 1/16W J	
RN408	T2901-JC012B	BEAD ARRAY	30Ω	
RN409	T2901-JC012B	BEAD ARRAY	30Ω	
RN410	T2901-JC012B	BEAD ARRAY	30Ω	
RN411	T2901-JC012B	BEAD ARRAY	30Ω	
RN503	T2901-JC012B	BEAD ARRAY	30Ω	
RN505	T2901-JC012B	BEAD ARRAY	30Ω	
RN508	T2901-JC012B	BEAD ARRAY	30Ω	
RN509	T2901-JC012B	BEAD ARRAY	30Ω	
RN510	T2901-JC012B	BEAD ARRAY	30Ω	
RN511	T2901-JC012B	BEAD ARRAY	30Ω	
RN512	T2901-JC012B	BEAD ARRAY	30Ω	
RN513	T2901-JC012B	BEAD ARRAY	30Ω	
RN514	T2901-JC012B	BEAD ARRAY	30Ω	
RN515	T2901-JC012B	BEAD ARRAY	30Ω	
RN516	T2901-JC012B	BEAD ARRAY	30Ω	
RN517	T2901-JC012B	BEAD ARRAY	30Ω	
RN518	T2901-JC012B	BEAD ARRAY	30Ω	
RN519	T2901-JC012B	BEAD ARRAY	30Ω	
RN520	T2901-JC012B	BEAD ARRAY	30Ω	
CE101	2401-000269	E CAPACITOR	100uF 16V M	
CE102	T2401-CT470O	E CAPACITOR	47uF 16V M	
CE103	2401-000914	E CAPACITOR	22uF 16V M	
CE105	2401-002235	E CAPACITOR	10uF 16V M	
CE106	2401-000603	E CAPACITOR	1uF 50V M	
CE107	2401-000603	E CAPACITOR	1uF 50V M	
CE108	T2401-FT0R1A	E CAPACITOR	0.1uF 50V M	
CE202	2401-002235	E CAPACITOR	10uF 16V M	
CE203	2401-002235	E CAPACITOR	10uF 16V M	
CE204	2401-002235	E CAPACITOR	10uF 16V M	
CE205	2401-002235	E CAPACITOR	10uF 16V M	
CE206	2401-002594	E CAPACITOR	220uF 16V M	
CE207	2401-002594	E CAPACITOR	220uF 16V M	
CE220	2401-000269	E CAPACITOR	100uF 16V M	
CE221	2401-000269	E CAPACITOR	100uF 16V M	
CE301	T2401-BT101O	E CAPACITOR	100uF10V M	
CE302	2401-000242	E CAPACITOR	100uF10V M	
CE305	2401-002235	E CAPACITOR	10uF 16V M	
CE402	2401-000914	E CAPACITOR	22uF 16V M	
CE404	2401-002235	E CAPACITOR	10uF 16V M	
CE405	2401-002235	E CAPACITOR	10uF 16V M	
CE407	2401-002235	E CAPACITOR	10uF 16V M	
CE408	2401-002235	E CAPACITOR	10uF 16V M	
CE410	2401-000603	E CAPACITOR	1uF 50V M	
CE411	2401-002075	E CAPACITOR	4.7uF 50V M	
CE412	2401-002235	E CAPACITOR	10uF 16V M	
CE413	2401-002235	E CAPACITOR	10uF 16V M	
CE414	2401-002075	E CAPACITOR	4.7uF 50V M	
CE415	2401-002235	E CAPACITOR	10uF 16V M	
CE416	2401-002075	E CAPACITOR	4.7uF 50V M	
CE502	T2401-CT221O	E CAPACITOR	220uF 16V M	
CE503	2401-000269	E CAPACITOR	100uF 16V M	
CE504	T2401-CT470O	E CAPACITOR	47uF 16V M	
CE505	2401-001495	E CAPACITOR	47uF 16V M	
CE506	2401-000914	E CAPACITOR	22uF 16V M	
CE507	2401-000914	E CAPACITOR	22uF 16V M	
CE508	2401-001495	E CAPACITOR	47uF 16V M	
CE509	2401-000914	E CAPACITOR	22uF 16V M	
CE510	2401-000914	E CAPACITOR	22uF 16V M	
CE511	2401-000914	E CAPACITOR	22uF 16V M	
CE512	2401-000914	E CAPACITOR	22uF 16V M	
CE513	2401-000914	E CAPACITOR	22uF 16V M	
CE514	2401-000914	E CAPACITOR	22uF 16V M	
CE515	2401-000914	E CAPACITOR	22uF 16V M	
CE516	2401-000914	E CAPACITOR	22uF 16V M	
CE517	2401-002235	E CAPACITOR	10uF 16V M	
CE518	2401-000269	E CAPACITOR	100uF 16V M	
CE601	2401-002594	E CAPACITOR	220uF 16V M	
CE602	2401-002594	E CAPACITOR	220uF 16V M	
CE603	2401-001495	E CAPACITOR	47uF 16V M	
CE604	2401-001495	E CAPACITOR	47uF 16V M	
CE605	2401-000603	E CAPACITOR	1uF 50V M	
CE606	2401-000242	E CAPACITOR	100uF10V M	
CE607	2401-002235	E CAPACITOR	10uF 16V M	
CE608	2401-002235	E CAPACITOR	10uF 16V M	
CE609	2401-002235	E CAPACITOR	10uF 16V M	
CE610	2401-002235	E CAPACITOR	10uF 16V M	
CE611	2401-002235	E CAPACITOR	10uF 16V M	
CE612	2401-001495	E CAPACITOR	47uF 16V M	
CE613	2401-002235	E CAPACITOR	10uF 16V M	
CE614	2401-002235	E CAPACITOR	10uF 16V M	
CE617	2401-002235	E CAPACITOR	10uF 16V M	
CE620	2401-002235	E CAPACITOR	10uF 16V M	
CE621	2401-002235	E CAPACITOR	10uF 16V M	
CE622	2401-000603	E CAPACITOR	1uF 50V M	
CE623	2401-000603	E CAPACITOR	1uF 50V M	
CE624	2401-002235	E CAPACITOR	10uF 16V M	
CE625	2401-000603	E CAPACITOR	1uF 50V M	
CE626	2401-000603	E CAPACITOR	1uF 50V M	
CE627	2401-001495	E CAPACITOR	47uF 16V M	
CE630	2401-000914	E CAPACITOR	22uF 16V M	
CE701	2401-000269	E CAPACITOR	100uF 16V M	
CE703	2401-000269	E CAPACITOR	100uF 16V M	
CE704	2401-000269	E CAPACITOR	100uF 16V M	
CE705	2401-000603	E CAPACITOR	1uF 50V M	
CE801	2401-002594	E CAPACITOR	220uF 16V M	
CE802	2401-001363	E CAPACITOR	470uF 16V M	
CE803	T2401-CT470O	E CAPACITOR	47uF 16V M	
CE804	2401-000269	E CAPACITOR	100uF 16V M	
CE805	2401-002594	E CAPACITOR	220uF 16V M	
CE808	T2401-CT221O	E CAPACITOR	220uF 16V M	
CE809	2401-000302	E CAPACITOR	100uF 25V M	
CE810	T2401-CT471O	E CAPACITOR	470uF 16V M	
CE811	2401-002594	E CAPACITOR	220uF 16V M	
J101	T3711-00037	CONNECTOR		
J102	AA60-40014A	CONNECTOR		
J201	T3722-00039A	JACK	PC IN	
J202	T3722-00040A	JACK	EXT-2	
J203	T3722-00040A	JACK	EXT-1	
J204	T3722-00042A	JACK	EXT-3	
J205	T3722-00041A	JACK	EXT-3/EXT-4	
J209	T3711-00034	CONNECTOR		
J210	T3711-00035	CONNECTOR		
J303	T3711-00033	CONNECTOR		
J304	T3711-00036	CONNECTOR		
J501	T3711-00019	CONNECTOR		
J601	T3711-00029	CONNECTOR		
J602	T3711-00037	CONNECTOR		
J801	T3711-00038	CONNECTOR		
X301	T2801-00011A	CRYSTAL	6MHz	
X401	T2801-00012A	CRYSTAL	27MHz	
X501	T2801-00013A	CRYSTAL	14.318MHz	
X601	T2801-00014A	CRYSTAL	18.432MHz	

POWER P.W. BOARD ASS'Y (QAL0748-001)

⚠Ref No.	Part No.	Part Name	Description	Local
FB2	T2901-JC008A	FERRITE BEAD		
FB3	T2901-JC008A	FERRITE BEAD		
FB4	T2901-JC008A	FERRITE BEAD		
FB5	T2901-JC008A	FERRITE BEAD		
FB6	T2901-JC008A	FERRITE BEAD		
FB7	T2901-JC008A	FERRITE BEAD		
FB8	T2901-JC008A	FERRITE BEAD		
FB9	T2901-IC009A	FERRITE BEAD		
Q1	T0507-00009A	TRANSISTOR		
Q2	T0507-00009A	TRANSISTOR		
Q3	T0507-00010A	TRANSISTOR		
Q4	T0501-00006A	POWER MOS FET		
Q5	T0501-00007A	POWER MOS FET		
Q6	T0507-00010A	TRANSISTOR		
Q7	T0501-00010A	TRANSISTOR		
Q8	T0501-00009A	POWER MOS FET		
Q9	T0507-00009A	TRANSISTOR		
Q10	T0507-00009A	TRANSISTOR		
Q11	T0507-00010A	TRANSISTOR		
Q12	T0501-00008A	POWER MOS FET		
Q13	T0507-00010A	TRANSISTOR		
Q14	T0507-00009A	TRANSISTOR		

⚠Ref No.	Part No.	Part Name	Description Local
U1	T1001-00091A	IC	
U2	T1001-00092A	IC	
U3	T1001-00096A	IC	
U4	T1001-00031A	IC	
U5	T1001-00092A	IC	
U6	T1001-00031A	IC	
U7	T1001-00093A	IC	
D1	T0402-00012A	DIODE	
D2	T0402-00014A	DIODE	
D4	T0407-00001A	DIODE	
D5	T0407-00001A	DIODE	
D6	T0402-00013A	DIODE	
D7	T0402-00013A	DIODE	
D8	T0402-00015A	DIODE	
D9	T0402-00016A	DIODE	
D10	T0407-00001A	DIODE	
D11	T0407-00001A	DIODE	
D12	T0402-00013A	DIODE	
D14	T0402-00017A	DIODE	
D15	T0402-00017A	DIODE	
D16	T0407-00001A	DIODE	
D17	T0407-00001A	DIODE	
D18	T0407-00001A	DIODE	
C2	T2306-TB105A	F CAPACITOR	1uF 630V J
C3	T2203-FC103E	C CAPACITOR	0.01uF 50V K
C4	T2203-FC101E	C CAPACITOR	0.01uF 50V J
C5	T2203-DC105E	C CAPACITOR	1uF 16V K
C6	T2203-DC105E	C CAPACITOR	1uF 16V K
C7	T2401-ET100O	E CAPACITOR	10uF 35V
C8	T2203-FC104E	C CAPACITOR	0.1uF 50V K
C9	T2203-FC104E	C CAPACITOR	0.1uF 50V K
C10	T2201-PB103A	C CAPACITOR	0.01uF 1KV Z
C11	T2401-NB150O	E CAPACITOR	150uF 450V
C12	T2401-FT220O	E CAPACITOR	22uF 50V
C13	T2203-FC104E	C CAPACITOR	0.1uF 50V K
C14	T2203-FC102E	C CAPACITOR	1000pF 50V K
C15	T2203-FC102E	C CAPACITOR	1000pF 50V K
C16	T2306-TB472A	F CAPACITOR	4700pF 630V K
C17	T2203-DC474E	C CAPACITOR	0.47uF 25V K
C18	T2401-ET101O	E CAPACITOR	100uF 35V
C19	T2201-PB222A	C CAPACITOR	2200pF 1KV K
C20	T2401-DT471O	E CAPACITOR	470uF 25V
C22	T2401-DT102O	E CAPACITOR	1000uF 25V
C23	T2203-FC104E	C CAPACITOR	0.1uF 50V K
C24	T2201-PB102A	C CAPACITOR	1000pF 1KV K
C25	T2401-BT332O	E CAPACITOR	3300uF 10V
C26	T2401-BT332O	E CAPACITOR	3300uF 10V
C27	T2401-BT102O	E CAPACITOR	1000uF 10V
C28	T2203-FC104E	C CAPACITOR	0.1uF 50V K
C29	T2401-ET101O	E CAPACITOR	100uF 35V
C30	T2203-FC104E	C CAPACITOR	0.1uF 50V K
C31	T2203-DC474E	C CAPACITOR	0.47uF 25V K
C32	T2401-FT220O	E CAPACITOR	22uF 50V
C33	T2203-FC104E	C CAPACITOR	0.1uF 50V K
C34	T2203-FC102E	C CAPACITOR	1000pF 50V K
C35	T2203-FC102E	C CAPACITOR	1000pF 50V K
C36	T2203-FC102E	C CAPACITOR	1000pF 50V K
C37	T2203-FC104E	C CAPACITOR	0.1uF 50V K
C38	T2203-FC104E	C CAPACITOR	0.1uF 50V K
C39	T2306-TB472A	F CAPACITOR	4700pF 630V K
C40	T2203-FC104E	C CAPACITOR	0.1uF 50V K
C41	T2201-PB102A	C CAPACITOR	1000pF 1KV K
C42	T2401-ET222O	E CAPACITOR	2200uF 35V
C43	T2401-ET222O	E CAPACITOR	2200uF 35V
C44	T2401-ET122O	E CAPACITOR	1200uF 35V
C45	T2203-FC104E	C CAPACITOR	0.1uF 50V K
C46	T2203-FC104E	C CAPACITOR	0.1uF 50V K
C47	T2203-DC474E	C CAPACITOR	0.47uF 25V K
C48	T2203-DC474E	C CAPACITOR	0.47uF 25V K
C49	T2203-FC104E	C CAPACITOR	0.1uF 50V K
C50	T2401-ET100O	E CAPACITOR	10uF 35V
C52	T2301-HT104A	F CAPACITOR	0.1uF 100V K
C21A	T2401-DT471O	E CAPACITOR	470uF 25V
C21B	T2401-DT471O	E CAPACITOR	470uF 25V
C27B	T2401-BT102O	E CAPACITOR	1000uF 10V
⚠CX1	T2306-U105A	F CAPACITOR	1uF 275V
⚠CX3	T2306-U474A	F CAPACITOR	0.47uF 275V
⚠CX5	T2201-MB102A	C CAPACITOR	1000pF
⚠CX6	T2201-MB102A	C CAPACITOR	1000pF
⚠CY1	T2201-MB102A	C CAPACITOR	1000pF
CY2	2201-000987	C CAPACITOR	2200pF
R1	T2007-IC364J	C RESISTOR	360KΩ J
R2	T2007-IC474J	C RESISTOR	470KΩ J
R3	T2007-IC434J	C RESISTOR	430KΩ J
R4	T2007-IC564J	C RESISTOR	560KΩ J
R5	T2007-IC123F	C RESISTOR	12KΩ F

⚠Ref No.	Part No.	Part Name	Description Local
R6	T2007-IC102J	C RESISTOR	1KΩ J
R6	T2007-IC273J	C RESISTOR	27KΩ J
R7	T2007-IC221J	C RESISTOR	220Ω J
R8	T2007-IC273J	C RESISTOR	27KΩ J
R9	T2007-IC222J	C RESISTOR	2.2KΩ J
R10	T2007-IC100J	C RESISTOR	10Ω J
R11	T2007-JC470J	C RESISTOR	47Ω J
R12	T2007-IC102J	C RESISTOR	1KΩ J
R13	T2007-IC304J	C RESISTOR	300KΩ J
R14	T2007-IC304J	C RESISTOR	300KΩ J
R15	T2007-IC304J	C RESISTOR	300KΩ J
R16	T2007-IC304J	C RESISTOR	300KΩ J
R17	T2007-IC752F	C RESISTOR	7.5KΩ F
R18	T2007-IC391J	C RESISTOR	390Ω J
R19	T2007-IC471J	C RESISTOR	470Ω J
R20	T2007-IC682J	C RESISTOR	6.8KΩ J
R21	T2007-IC682J	C RESISTOR	6.8KΩ J
R22	T2007-IC682J	C RESISTOR	6.8KΩ J
R23	T2007-IC222J	C RESISTOR	2.2KΩ J
R24	T2007-JC470J	C RESISTOR	47Ω J
R25	T2007-IC103J	C RESISTOR	10KΩ J
R26	T2007-IC102J	C RESISTOR	1KΩ J
R27	T2003-ET823A	MF RESISTOR	82KΩ 3W J
R28	T2007-IC153J	C RESISTOR	15KΩ J
R29	T2007-IC222J	C RESISTOR	2.2KΩ J
R30	T2007-IC153J	C RESISTOR	15KΩ J
R31	T2007-IC102J	C RESISTOR	1KΩ J
R32	T2007-IC153J	C RESISTOR	15KΩ J
R33	T2003-CT4R7R	MF RESISTOR	4.7Ω 1W J
R34	T2003-ET470A	MF RESISTOR	47Ω 3W J
R35	T2007-IC103J	C RESISTOR	10KΩ J
R36	T2007-IC103J	C RESISTOR	10KΩ J
R37	T2007-IC273J	C RESISTOR	27KΩ J
R38	T2003-ET220A	MF RESISTOR	22Ω 3W J
R39	T2007-JC122J	C RESISTOR	1.2KΩ J
R40	T2007-IC392J	C RESISTOR	3.9KΩ J
R41	T2007-IC222J	C RESISTOR	2.2KΩ J
R42	T2007-IC471J	C RESISTOR	470Ω J
R43	T2007-IC222J	C RESISTOR	2.2KΩ J
R44	T2007-IC101J	C RESISTOR	100Ω J
R45	T2007-IC101F	C RESISTOR	100Ω F
R46	T2007-IC202F	C RESISTOR	2KΩ F
R47	T2007-IC202F	C RESISTOR	2KΩ F
R48	T2003-CT1R5R	MF RESISTOR	1.5Ω 1W J
R49	T2007-IC153J	C RESISTOR	15KΩ J
R50	T2007-IC103J	C RESISTOR	10KΩ J
R51	T2007-IC153J	C RESISTOR	15KΩ J
R52	T2007-IC100J	C RESISTOR	10Ω J
R53	T2007-JC470J	C RESISTOR	47Ω J
R54	T2007-IC103J	C RESISTOR	10KΩ J
R55	T2003-ET224A	MF RESISTOR	220KΩ 3W J
R56	T2003-ET224A	MF RESISTOR	220KΩ 3W J
R57	T2007-IC123F	C RESISTOR	12KΩ F
R58	T2007-IC153J	C RESISTOR	15KΩ J
R59	T2007-IC103J	C RESISTOR	10KΩ J
R60	T2003-ET220A	MF RESISTOR	22Ω 3W J
R61	T2007-IC153J	C RESISTOR	15KΩ J
R62	T2007-JC122J	C RESISTOR	1.2KΩ J
R63	T2007-JC122J	C RESISTOR	1.2KΩ J
R64	T2007-IC222J	C RESISTOR	2.2KΩ J
R65	T2007-IC101J	C RESISTOR	100Ω J
R66	T2007-IC153F	C RESISTOR	15KΩ F
R67	T2007-IC242F	C RESISTOR	2.4KΩ F
R68	T2007-IC202F	C RESISTOR	2KΩ F
R69	T2007-IC123F	C RESISTOR	12KΩ F
R70	T2007-IC152J	C RESISTOR	1.5KΩ J
R71	T2007-IC181J	C RESISTOR	180Ω J
R72	T2007-IC181J	C RESISTOR	180Ω J
R73	T2007-IC123F	C RESISTOR	12KΩ F
R74	T2007-IC153J	C RESISTOR	15KΩ J
R75	T2007-IC683J	C RESISTOR	68KΩ J
R76	T2007-IC222J	C RESISTOR	2.2KΩ J
R77	T2007-IC562J	C RESISTOR	5.6KΩ J
R78	T2007-JC331J	C RESISTOR	330Ω J
R79	T2007-IC562J	C RESISTOR	5.6KΩ J
R80	T2007-IC562J	C RESISTOR	5.6KΩ J
R81	T2007-IC153J	C RESISTOR	15KΩ J
R82	T2007-IC102J	C RESISTOR	1KΩ J
R83	T2007-IC153J	C RESISTOR	15KΩ J
R84	T2007-IC562J	C RESISTOR	5.6KΩ J
R85	T2007-IC102J	C RESISTOR	1KΩ J
R87	T2007-IC103J	C RESISTOR	10KΩ J
R88	T2007-IC222J	C RESISTOR	2.2KΩ J
R89	T2007-IC102J	C RESISTOR	1KΩ J
R34B	T2003-ET470A	MF RESISTOR	47Ω 3W J
RX	T2007-JC564J	C RESISTOR	560KΩ J
RX1	T2007-JC564J	C RESISTOR	560KΩ J
RX2	T2007-JC564J	C RESISTOR	560KΩ J
L1	TV49-00005A	CHOKE BAR	5.5uH

⚠Ref No.	Part No.	Part Name	Description	Local
L3	TV09-00004A	CHOKE BAR	5.0uH	
L4	TA49-00004A	INDUCTOR FILTER	100uH 7A	
T1	TV26-3L01A	TRANSFOMER		
T2	TV26-26L02A	TRANSFOMER		
T3	TV26-26L03A	TRANSFOMER		
BD1	T0402-00018A	BRIDGE-DIODE		
⚠CN1	T3711-00039	CONNECTOR		
CN2	T3711-00040	CONNECTOR		
CN3	T3711-00041	CONNECTOR		
⚠FU1	3601-000297	FUSE	250V 5A	
LF1	AB63-00012A	LINE FILTER	15mH 4A	
LF2	AB63-00012A	LINE FILTER	15mH 4A	
NT1	T1404-00001A	THERMISTOR		
PC1	T1001-00094A	PHOTO COUPLER		
PC2	T1001-00094A	PHOTO COUPLER		
PC3	T1001-00094A	PHOTO COUPLER		
RC1	T2007-JC224J	C RESISTOR	220KΩ J	
RC2	T2007-JC224J	C RESISTOR	220KΩ J	
RC3	T2007-JC224J	C RESISTOR	220KΩ J	
RS1	T2003-ETR15A	R-WIRE	0.2Ω 3W J	
RS2	T2003-ETR62A	R-WIRE	0.62Ω 3W J	
RS3	T2003-ET0R2A	R-WIRE	0.2Ω 3W J	
SC1	T0501-00011A	SCR	0.8A 30V	
⚠VX1	T1405-0011A	VARISTOR		
⚠VX4	T1405-0011A	VARISTOR		
ZD1	T0408-00007A	Z DIODE		
ZD2	T0408-00006A	Z DIODE		
ZD3	T0408-00008A	Z DIODE		
ZD4	T0408-00007A	Z DIODE		
ZD5	T0408-00005A	Z DIODE		
ZD6	T0408-00005A	Z DIODE		
ZD7	T0408-00005A	Z DIODE		
ZD8	T0408-00008A	Z DIODE		
ZD9	T0408-00007A	Z DIODE		
ZD10	T0408-00006A	Z DIODE		

KEY P.W. BOARD ASS'Y (QAL0730-001)

⚠Ref No.	Part No.	Part Name	Description	Local
D201	T0407-00004A	DIODE		
C246	T2203-FC332D	C CAPACITOR	3300pF 50V K	
C247	T2203-FC332D	C CAPACITOR	3300pF 50V K	
R205	2007-000122	C RESISTOR	1.2KΩ 1/16W J	
R206	2007-000120	C RESISTOR	680Ω 1/16W J	
R207	2007-000124	C RESISTOR	2.2KΩ 1/16W J	
R208	2007-000122	C RESISTOR	1.2KΩ 1/16W J	
R209	2007-000120	C RESISTOR	680Ω 1/16W J	
R293	2007-000113	C RESISTOR	33Ω 1/16W J	
L226	T2901-AC002A	CHIP BEAD	80Ω	
L227	T2901-AC002A	CHIP BEAD	80Ω	
L240	T2901-CC004A	CHIP BEAD	500Ω	
J1	3812-000219	JUMPER		
J207	T3722-0043A	JACK		
J209	T3711-00035	CONNECTOR		
S201	T3404-00004A	TACT SWITCH	POWER	
S202	T3404-00004A	TACT SWITCH	TV/AV	
S203	T3404-00004A	TACT SWITCH	MENU/OK	
S204	T3404-00004A	TACT SWITCH	CH+	
S205	T3404-00004A	TACT SWITCH	CH-	
S206	T3404-00004A	TACT SWITCH	VOL+	
S207	T3404-00004A	TACT SWITCH	VOL-	
ZD228	T0408-00002A	Z DIODE		
ZD229	T0408-00002A	Z DIODE		

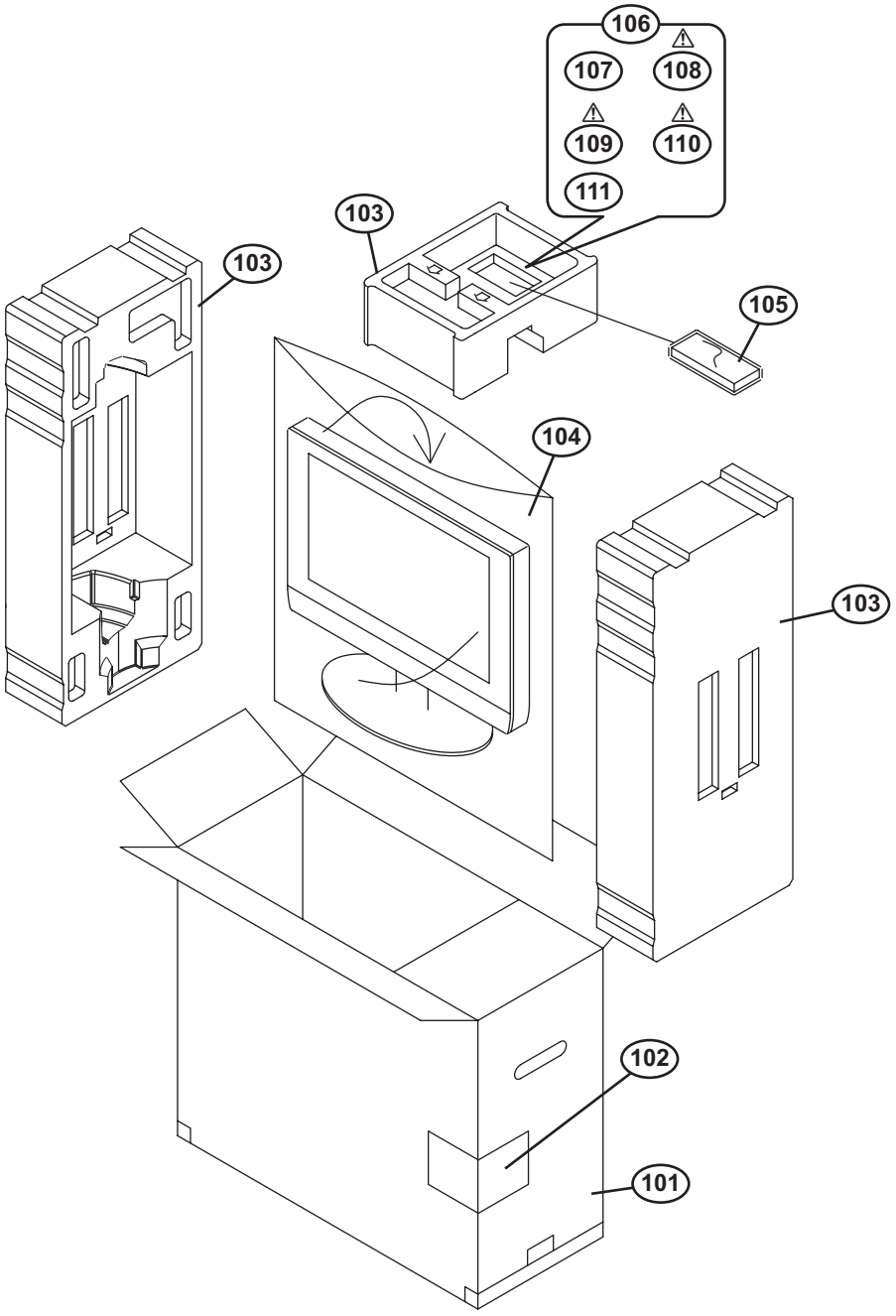
LED P.W. BOARD ASS'Y (QAL0731-001)

⚠Ref No.	Part No.	Part Name	Description	Local
IR201	TA59-00037A	IR RECEIVER		
Q201	T0507-00001A	TRANSISTOR		
Q204	T0507-00001A	TRANSISTOR		
C237	T2203-FC102D	C CAPACITOR	1000pF 50V K	
R201	2007-000084	C RESISTOR	4.7KΩ 1/16W J	
R202	2007-000078	C RESISTOR	1KΩ 1/16W J	
R203	2007-000309	C RESISTOR	10Ω 1/16W J	
R204	2007-000081	C RESISTOR	2.7KΩ 1/16W J	
R297	2007-000090	C RESISTOR	10KΩ 1/16W J	
R298	2007-000090	C RESISTOR	10KΩ 1/16W J	
CE201	2401-001495	E CAPACITOR	47uF 16V M	
J210	T3711-00034	CONNECTOR		
J211	T3711-00034	CONNECTOR		
LD201	T0601-00002A	LED	POWER	

REMOTE CONTROL UNIT PARTS LIST (RM-C1816S-1C)

⚠ Ref.No.	Part No.	Part Name	Description	Local
	2AA070311	BATTERY COVER		

PACKING



PACKING PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description	Local
	101	GA10002-057A-U	PACKING CASE		
	102	GA10001-060A-U	EURO LABEL		LT-32A60BU
	102	GA10001-061A-U	EURO LABEL		LT-32A60SJ
	102	GA10001-059A-U	EURO LABEL		LT-32A60SU
	103	GA10049-001A-U	CUSHION ASSY	3pcs in 1set	
	104	GA10026-002A-U	POLY BAG		
	105	RM-C1816S-1C	REMOCON UNIT		
	106	GA30007-001A-U	DOCUMENT BAGS	(x2)	LT-32A60BU,LT-32A60SJ
	106	AEM3021-003B-E	DOCUMENT BAGS	(x2)	LT-32A60SU
	107	----------	WARRANTY CARD	BT-54026-1E	
⚠	108	LCT1863-001B-U	INST BOOK	English	LT-32A60SJ
⚠	108	LCT1860-001B-U	INST BOOK	English/German/French/Dutch/Spanish/Italian/Portuguese	LT-32A60BU,LT-32A60SU
⚠	109	LCT1861-001B-U	INST BOOK	Norwegian/Finn/Danish/Swedish	LT-32A60BU,LT-32A60SU
⚠	110	LCT1862-001B-U	INST BOOK	Russian/Romanian/Czech/Polish/Hungarian/Bulgarian	LT-32A60BU,LT-32A60SU
	111	----------	BATTERY	R6P/AA(x2)	

JVC

SCHEMATIC DIAGRAMS

WIDE LCD PANEL TELEVISION

LT-32A60BU,
LT-32A60SJ,
LT-32A60SU

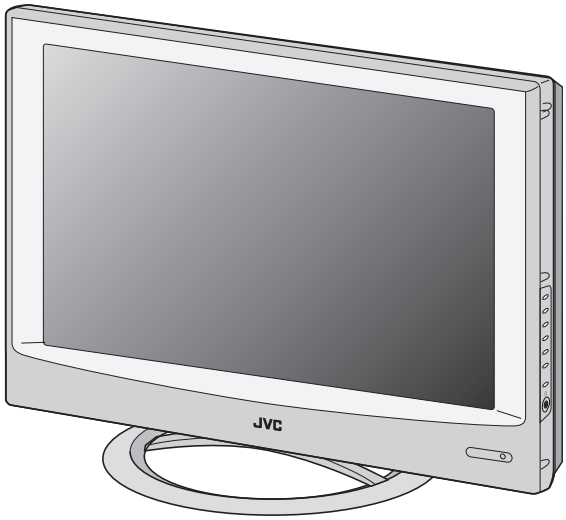
CD-ROM No.SML200510

BASIC CHASSIS
FT

InteriArt

T-V LINK





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No.YA315
2005/10

LT-32A60BU, LT-32A60SJ, LT-32A60SU

STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the ⚠ symbol and shading are critical for safety. For continued safety replace safety ciritical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal	: Colour bar signal
(2)Setting positions of each knob/button and variable resistor	: Original setting position when shipped
(3)Internal resistance of tester	: DC 20kΩ/V
(4)Oscilloscope sweeping time	: H ⇒ 20μs / div
	: V ⇒ 5ms / div
	: Othters ⇒ Sweeping time is specified
(5)Voltage values	: All DC voltage values

∗ Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

● In the PW board : R209 → R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

● Resistance value

No unit	: [Ω]
K	: [kΩ]
M	: [MΩ]

● Rated allowable power

No indication	: 1/16 [W]
Others	: As specified

● Type

No indication	: Carbon resistor
OMR	: Oxide metal film resistor
MFR	: Metal film resistor
MPR	: Metal plate resistor
UNFR	: Uninflammable resistor
FR	: Fusible resistor

∗ Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

● Capacitance value

1 or higher	: [pF]
less than 1	: [μF]

● Withstand voltage

No indication	: DC50[V]
Others	: DC withstand voltage [V]
AC indicated	: AC withstand voltage [V]

∗ Electrolytic Capacitors

47/50[Example]: Capacitance value [μF]/withstand voltage[V]

● Type

No indication	: Ceramic capacitor
MM	: Metalized mylar capacitor
PP	: Polypropylene capacitor
MPP	: Metalized polypropylene capacitor
MF	: Metalized film capacitor
TF	: Thin film capacitor
BP	: Bipolar electrolytic capacitor
TAN	: Tantalum capacitor

(3)Coils

No unit	: [μH]
Others	: As specified

(4)Power Supply

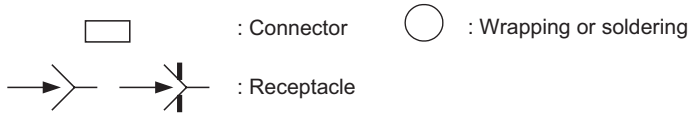


∗ Respective voltage values are indicated

(5)Test point



(6)Connecting method



(7)Ground symbol



5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED(NEUTRAL) : (⏚) side GND. Therefore, care must be taken for the following points.

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. if the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected, a fuse or any parts will be broken.

◆ **Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.**

NOTE

◆ **Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.**
When ordering parts, please use the numbers that appear in the Parts List.

CONTENTS

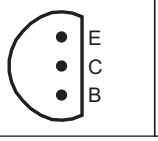
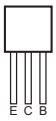
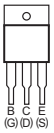
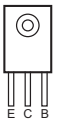
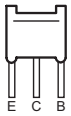
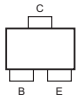
SEMICONDUCTOR SHAPES 2-2
WIRING DIAGRAM 2-3
BLOCK DIAGRAM 2-5
CIRCUIT DIAGRAMS
MAIN PWB CIRCUIT DIAGRAM 2-7
KEY PWB CIRCUIT DIAGRAM 2-17
LED PWB CIRCUIT DIAGRAM 2-18
POWER PWB CIRCUIT DIAGRAM 2-19
PATTERN DIAGRAMS
MAIN PWB PATTERN 2-25
POWER PWB PATTERN 2-29
KEY PWB PATTERN 2-31
LED PWB PATTERN 2-31
VOLTAGE CHATRS 2-33
WAVEFORMS 2-34

USING P.W. BOARD

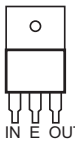
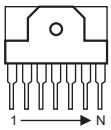
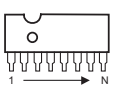
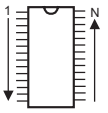
P.W.B ASS'Y name	LT-32A60BU	LT-32A60SJ	LT-32A60SU
MAIN P.W BOARD	QAL0747-001	←	←
POWER P.W BOARD	QAL0748-001	←	←
KEY P.W BOARD	QAL0730-001	←	←
LED P.W BOARD	QAL0731-001	←	←

SEMICONDUCTOR SHAPES

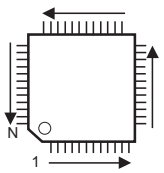
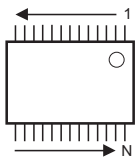
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR 

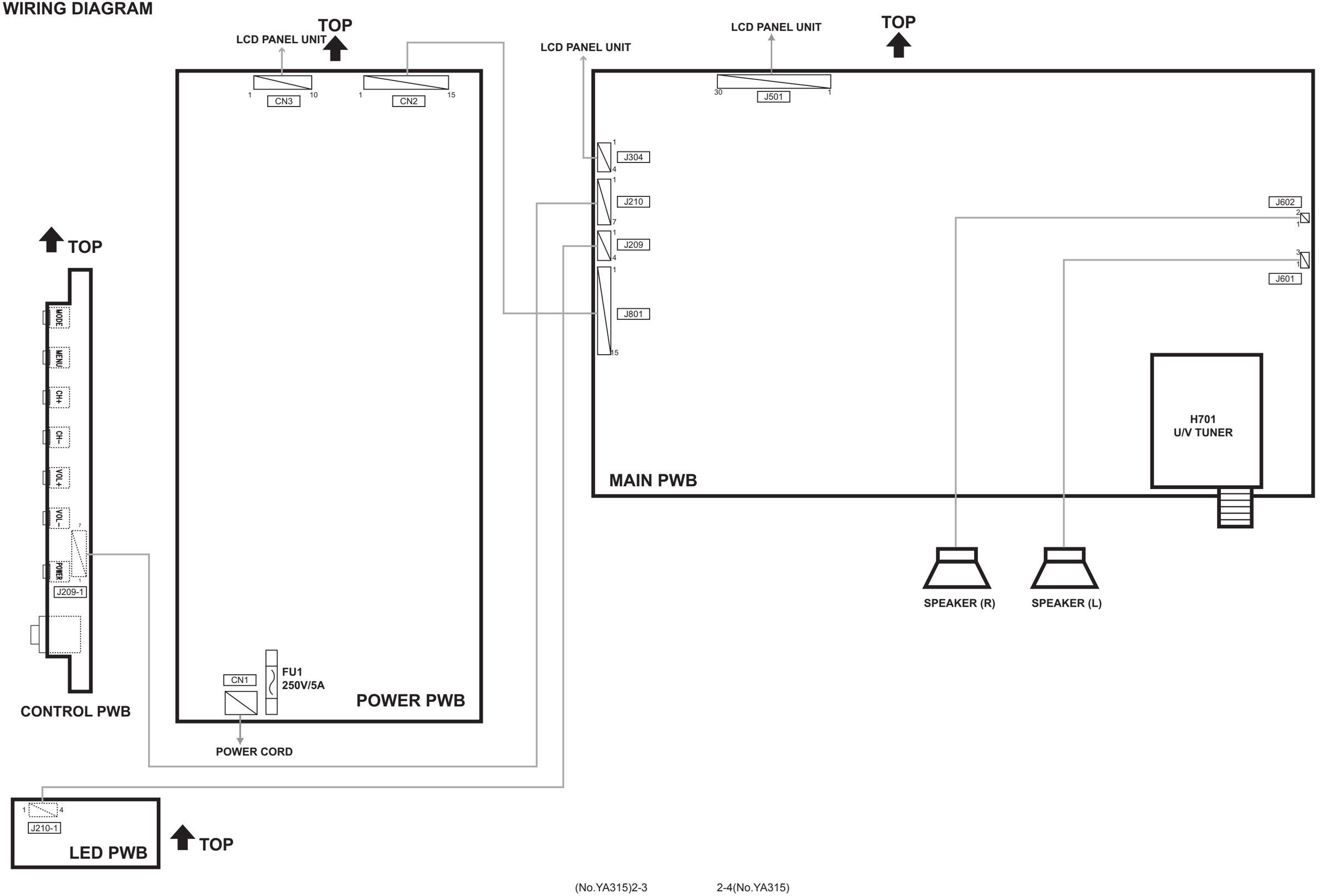
IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW
				

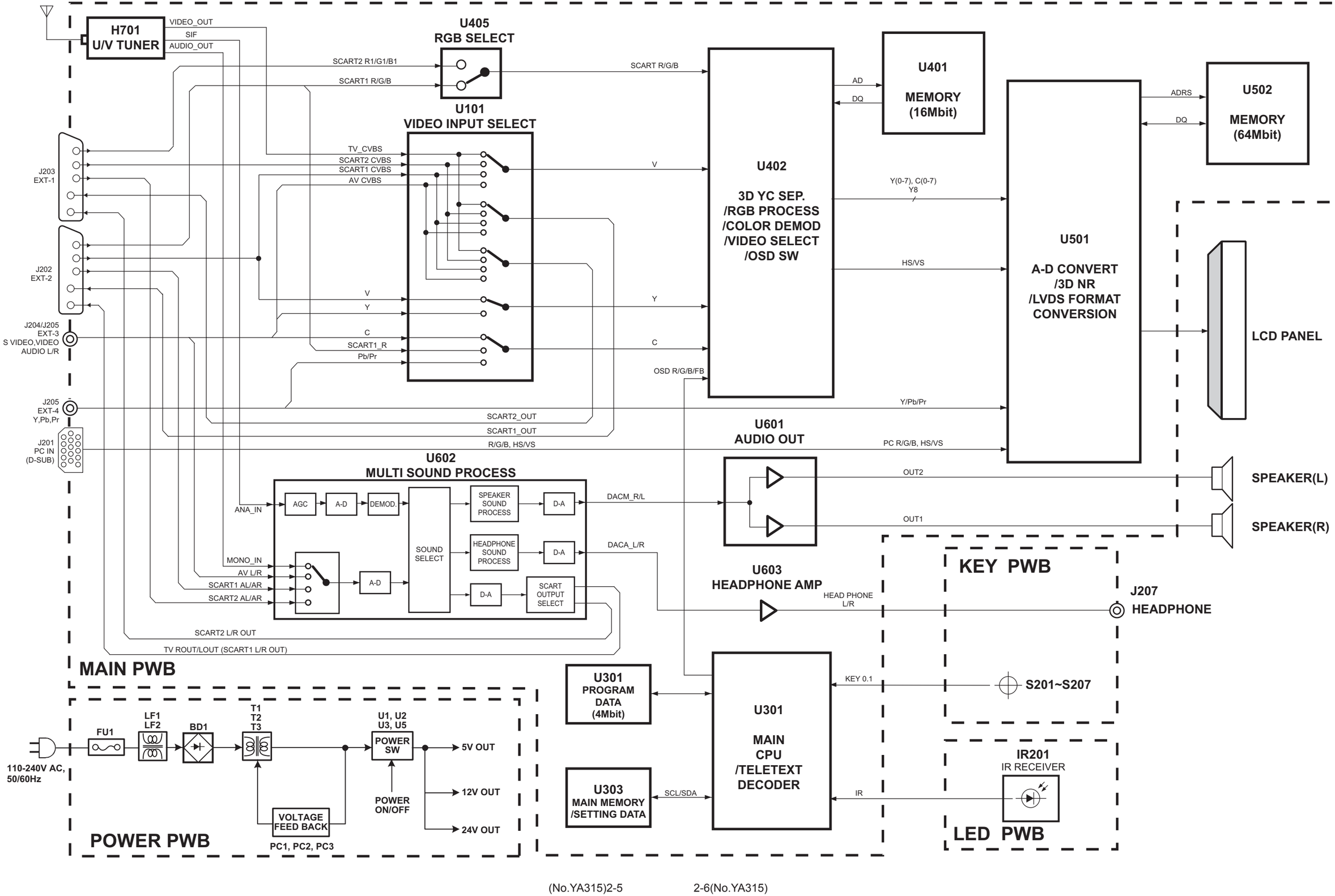
CHIP IC

TOP VIEW		
		

WIRING DIAGRAM

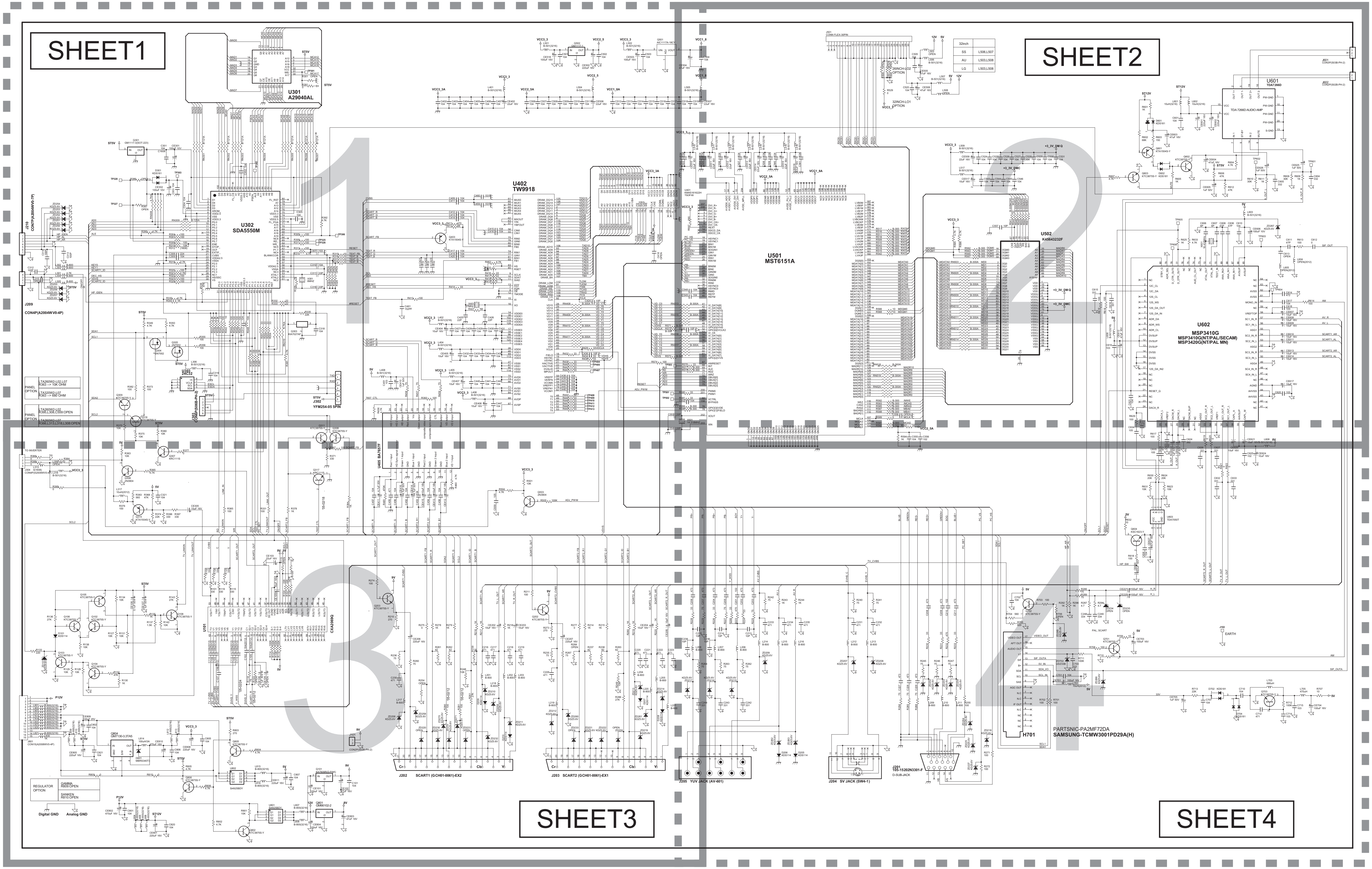


BLOCK DIAGRAM



CIRCUIT DIAGRAMS

MAIN PWB CIRCUIT DIAGRAM [WHOLE CHART]



Note: Please refer to SHEET1-4 for details of this circuit diagram.

MAIN PWB ASS'Y (1/4)
QAL0747-001

KEY PWB ASS'Y
J209-1
(SHEET5)

LED PWB ASS'Y
J210-1
(SHEET6)

J210
CON7P(A2004WV0-7P)

J209
CON4P(A2004WV0-4P)

U301
A29040AL

U302
SDA5550M

U303
G30N(PS06B-PH-2)

U402
TW9918

J302
YFM254-05 5PIN

U401
KM4S161622H
TSOP-50

PANEL OPTION	
LTA260W2-L02,L07 R363 --> 10K OHM	
LTA320W2-L07 R363 --> 680 OHM	

PANEL OPTION	
LTA260W2-L02 R395,L306,C559:OPEN	
LTA260W2-L07 R366,L313,L318,L308:OPEN	

NOTE : Refer to the part list for the part number of U303.

MAIN PWB ASS'Y (2/4)
QAL0747-001

LED PANEL UNIT

J501
CONN FLEX-30PIN

U501
MST6151A

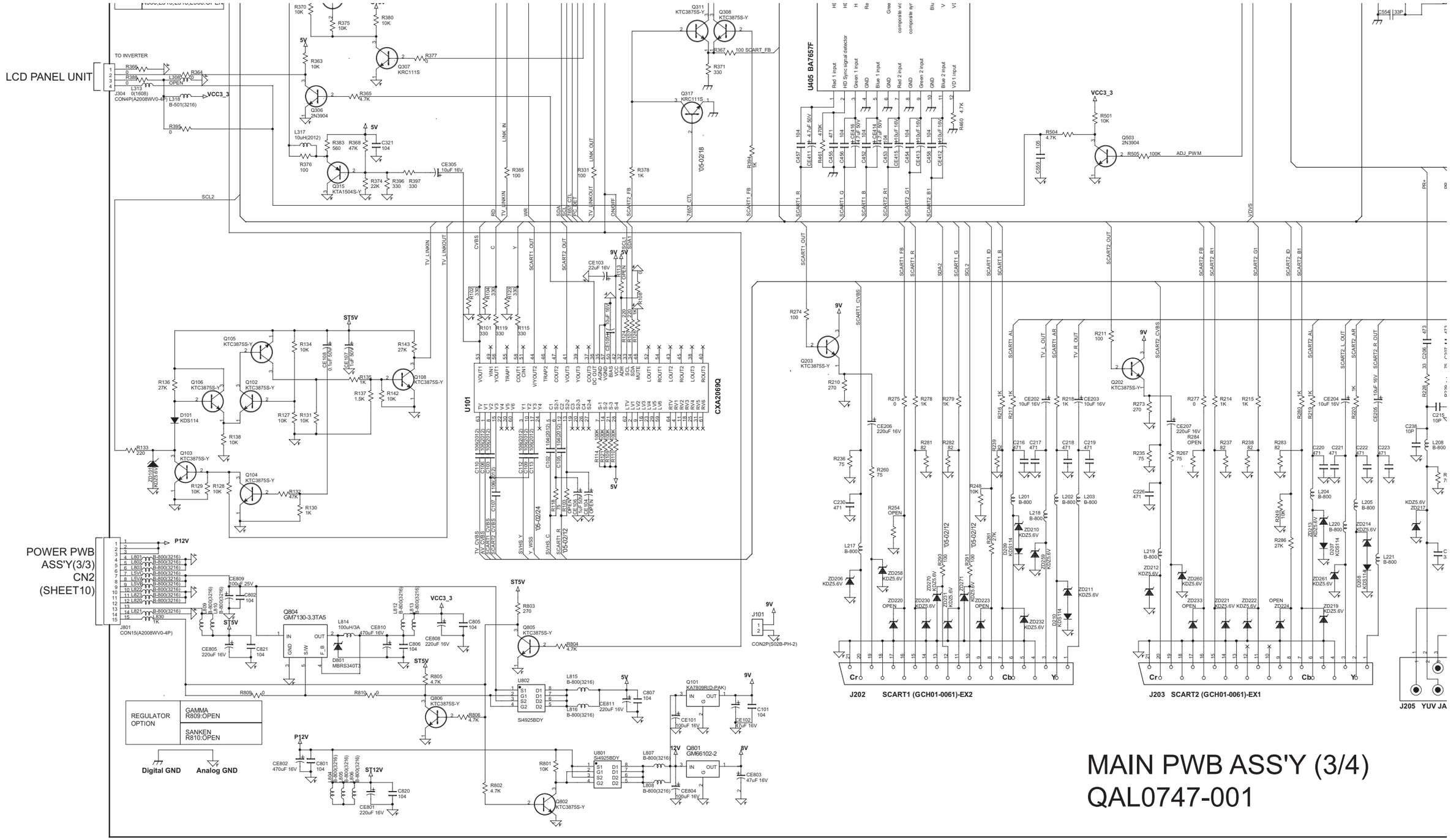
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K45643232F

U601
TDA7266D
TDA 7266D AUDIO AMP

U602
MSP3410G
MSP3410G(NT/PAL/SECAM)
MSP3420G(NT/PAL MN)

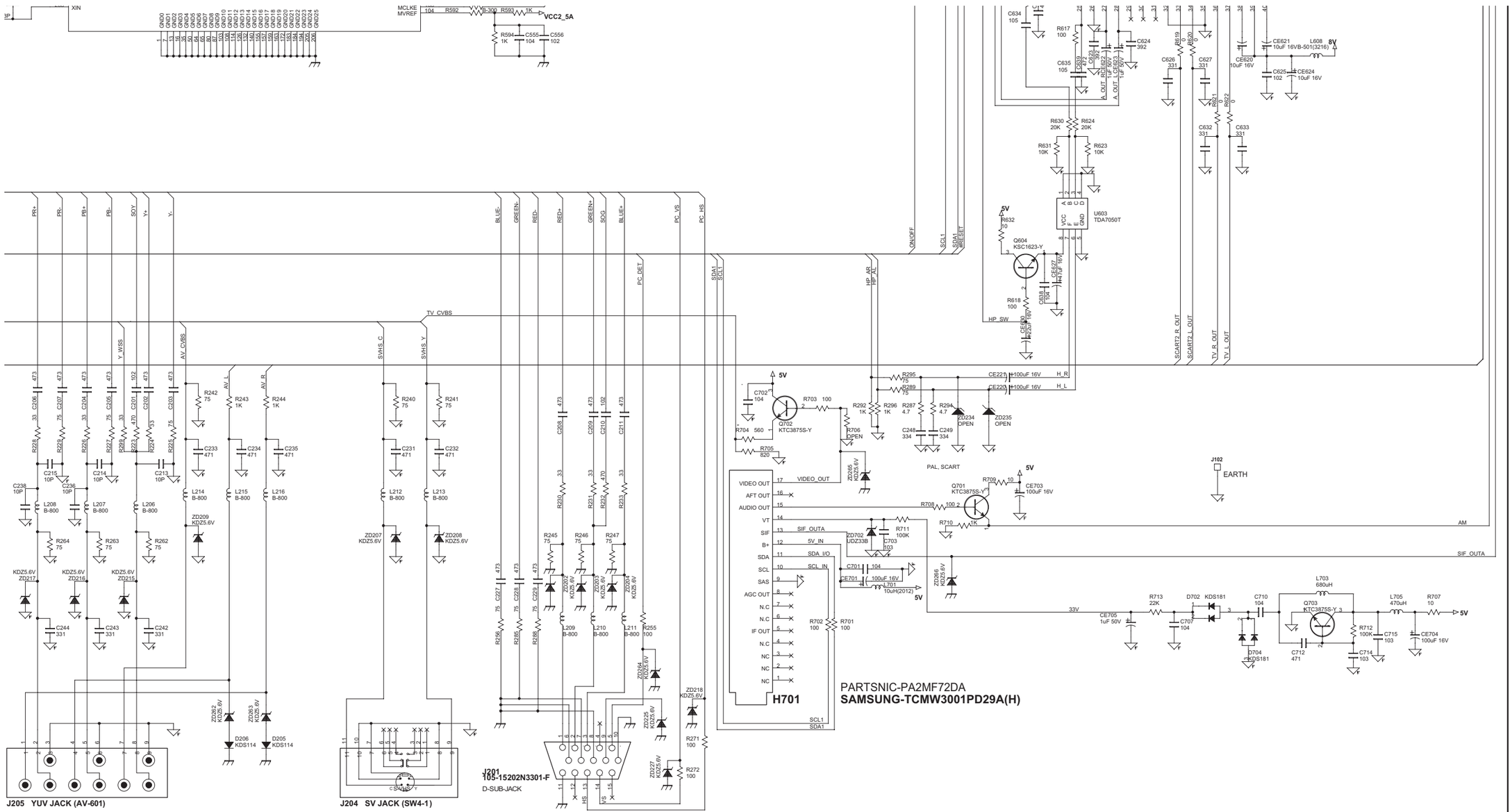
SPEAKER (L)
SPEAKER (R)

MAIN PWB CIRCUIT DIAGRAM (3/4) SHEET3



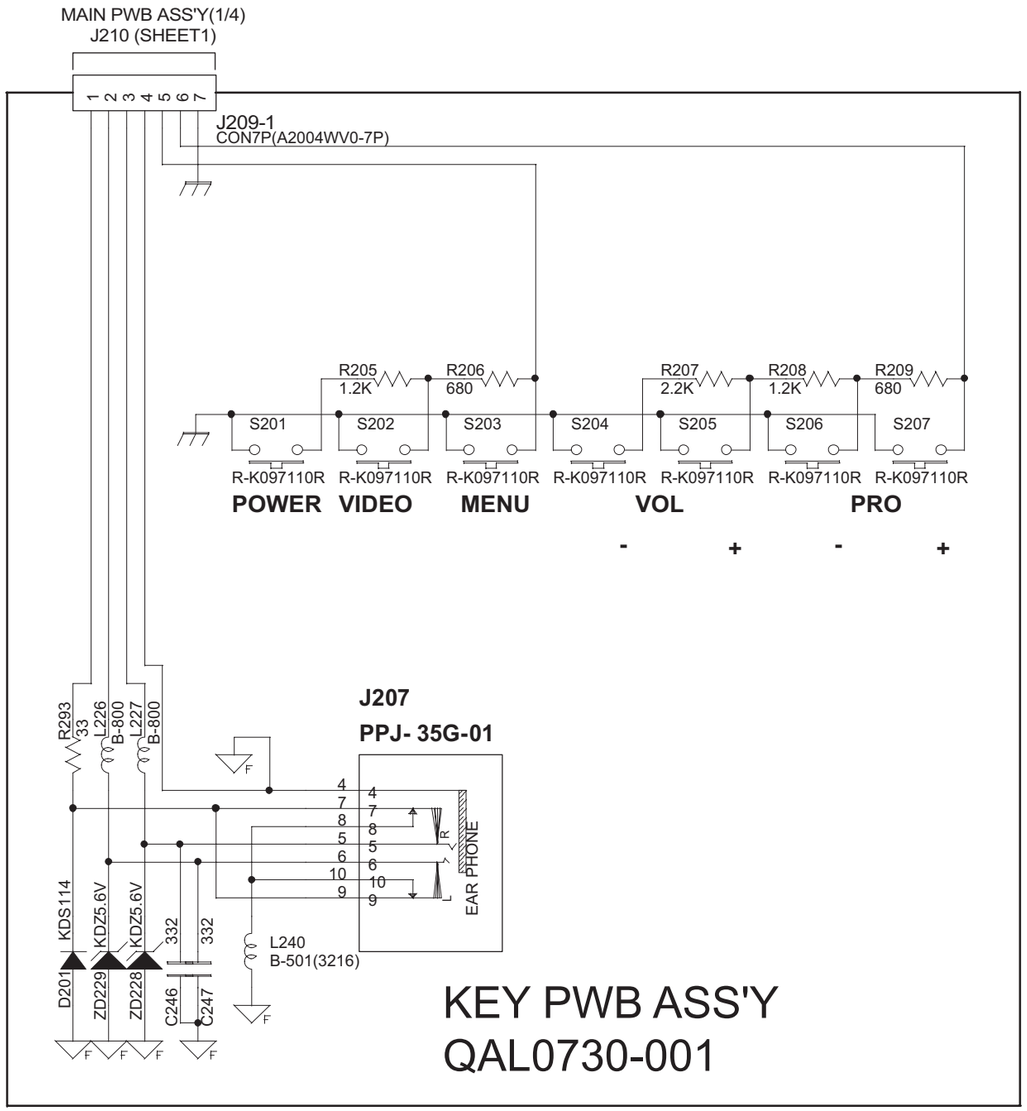
MAIN PWB ASS'Y (3/4)
QAL0747-001

MAIN PWB CIRCUIT DIAGRAM (4/4) SHEET4



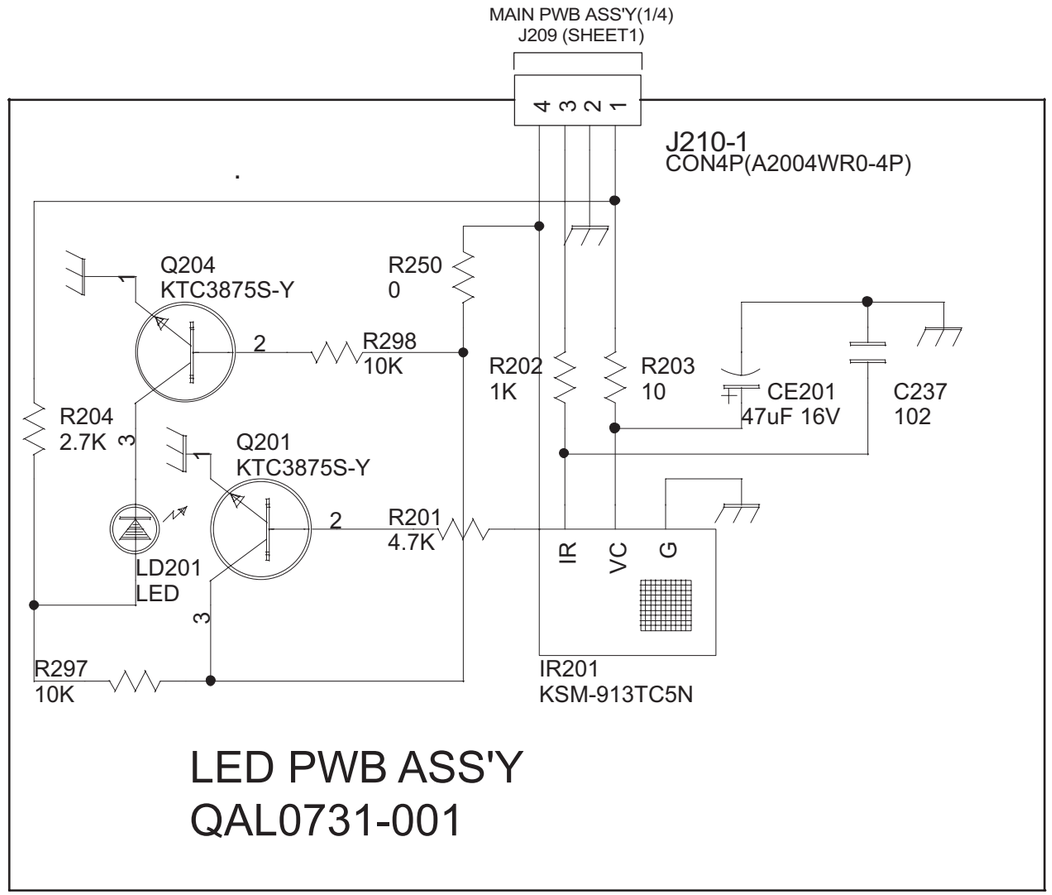
MAIN PWB ASS'Y (4/4)
QAL0747-001

KEY PWB CIRCUIT DIAGRAM SHEET 5



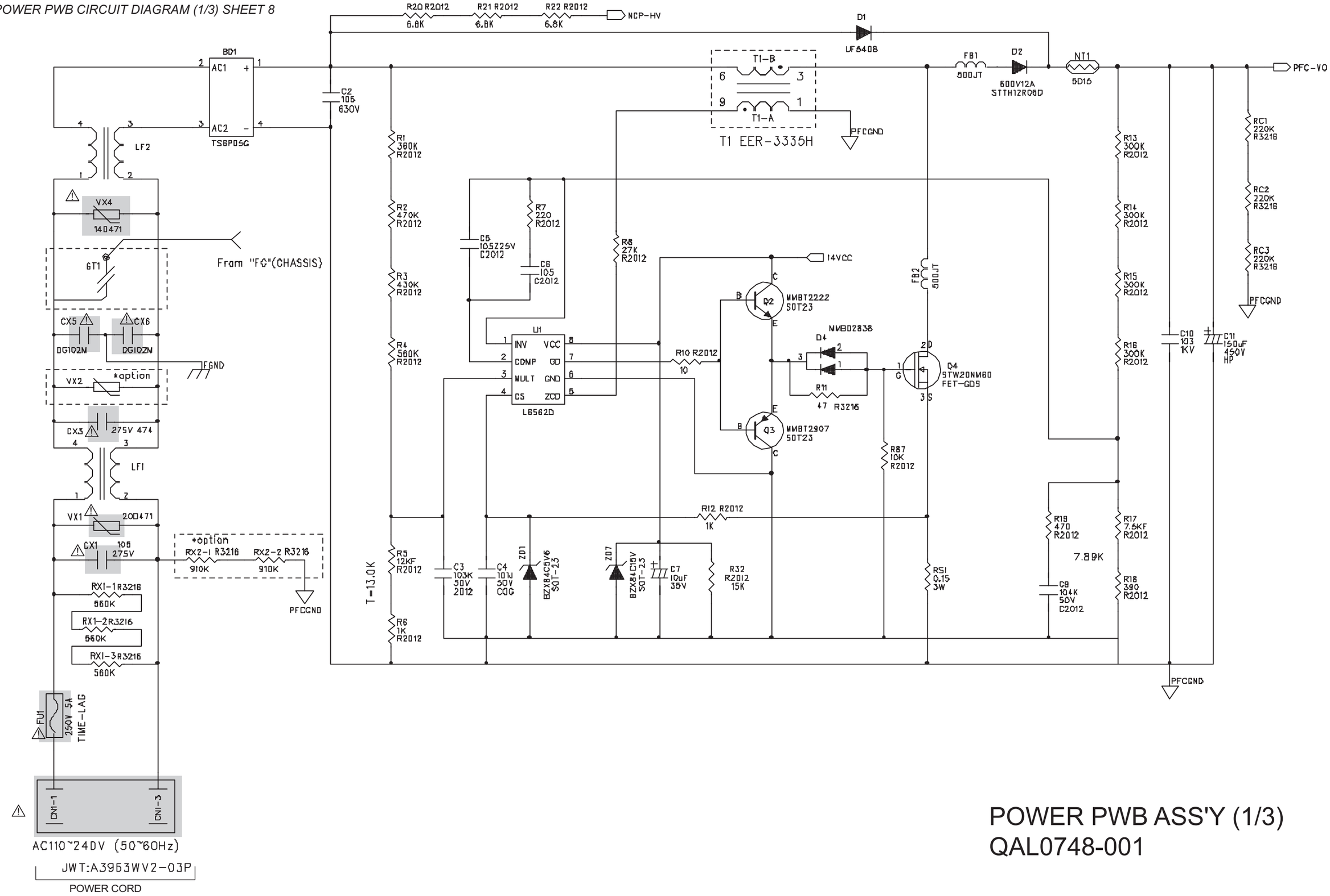
KEY PWB ASS'Y
QAL0730-001

LED PWB CIRCUIT DIAGRAM SHEET 6

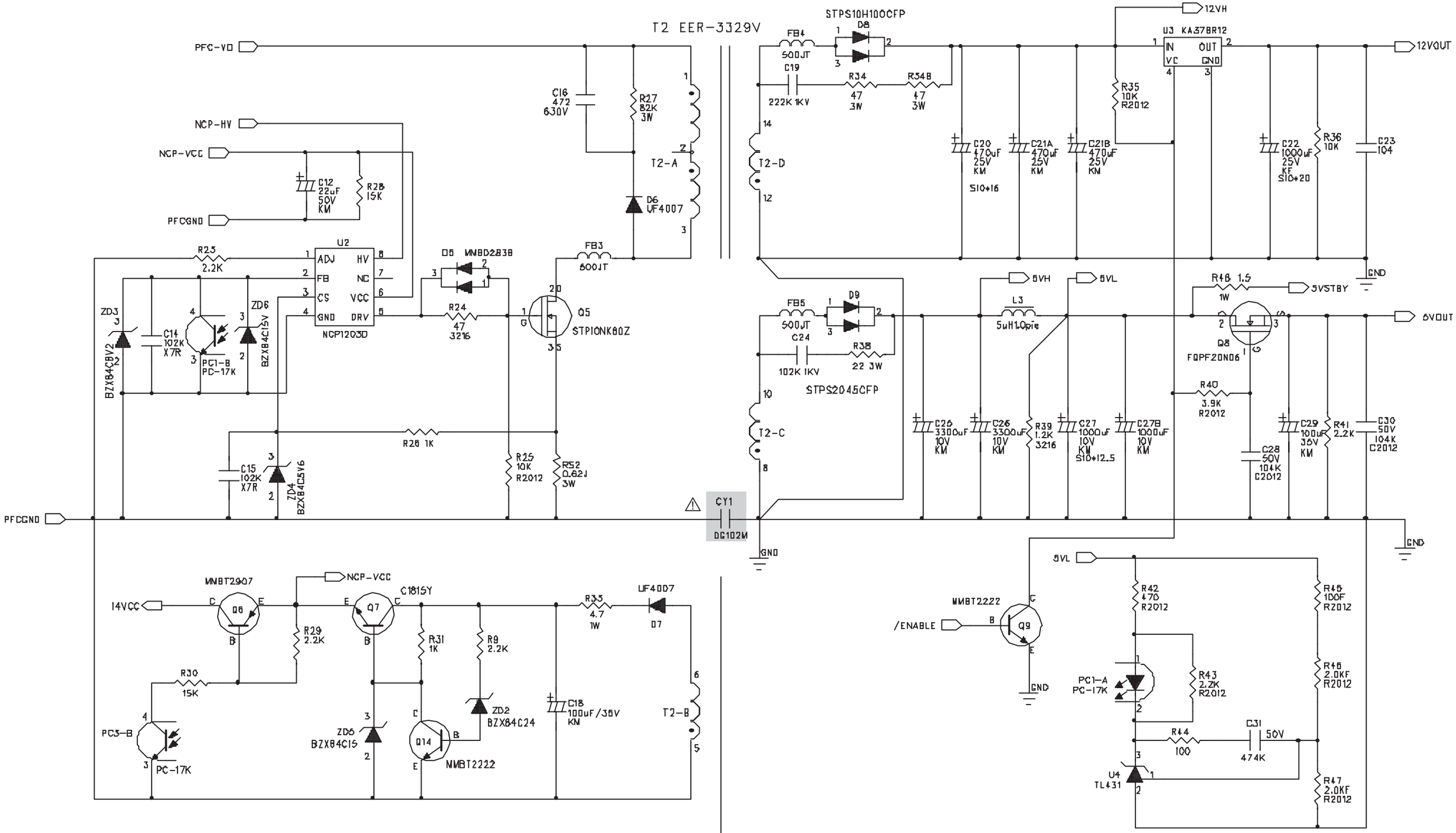


LED PWB ASS'Y
QAL0731-001

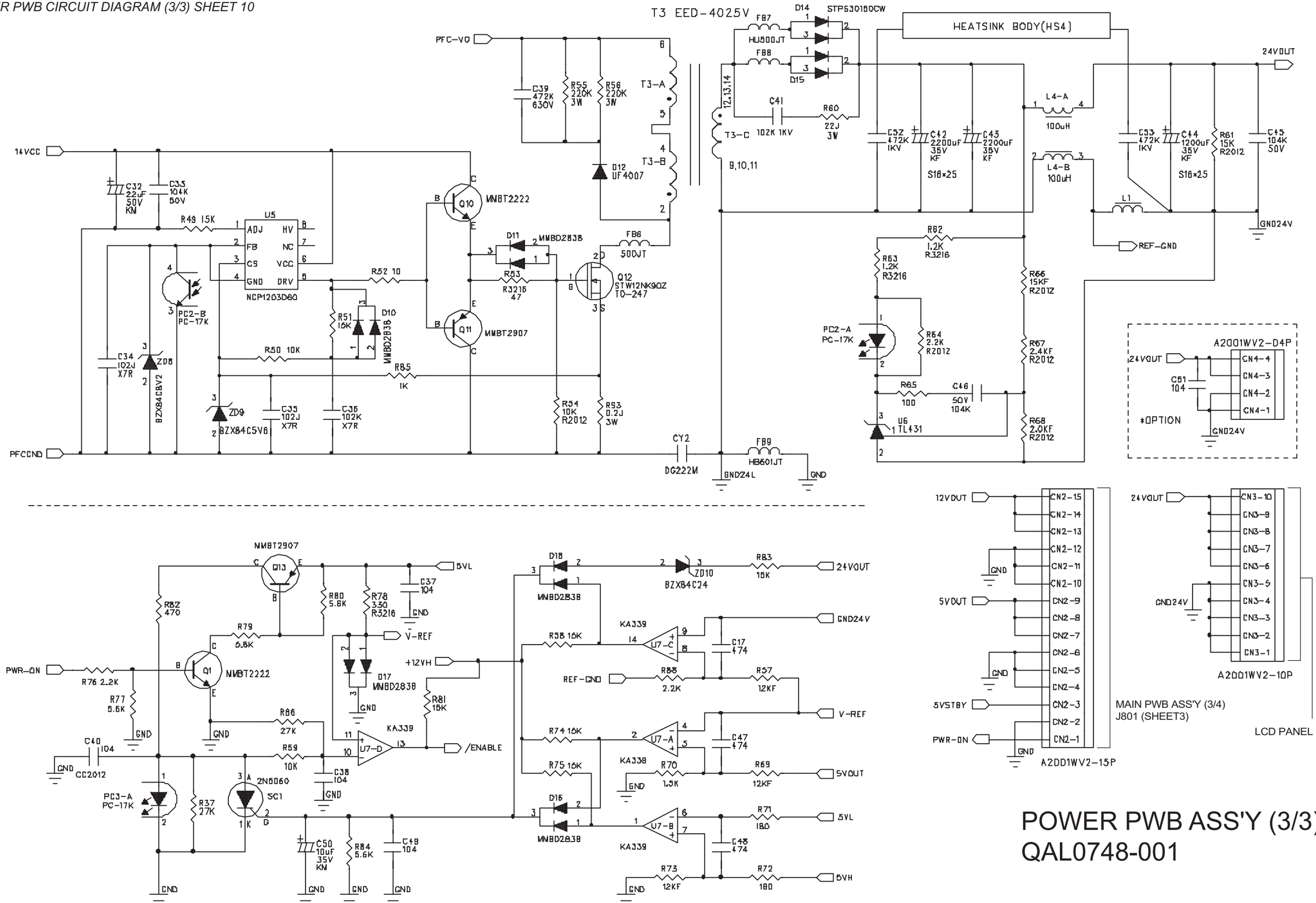
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POWER PWB ASS'Y (1/3)
QAL0748-001



POWER PWB ASS'Y (2/3)
QAL0748-001

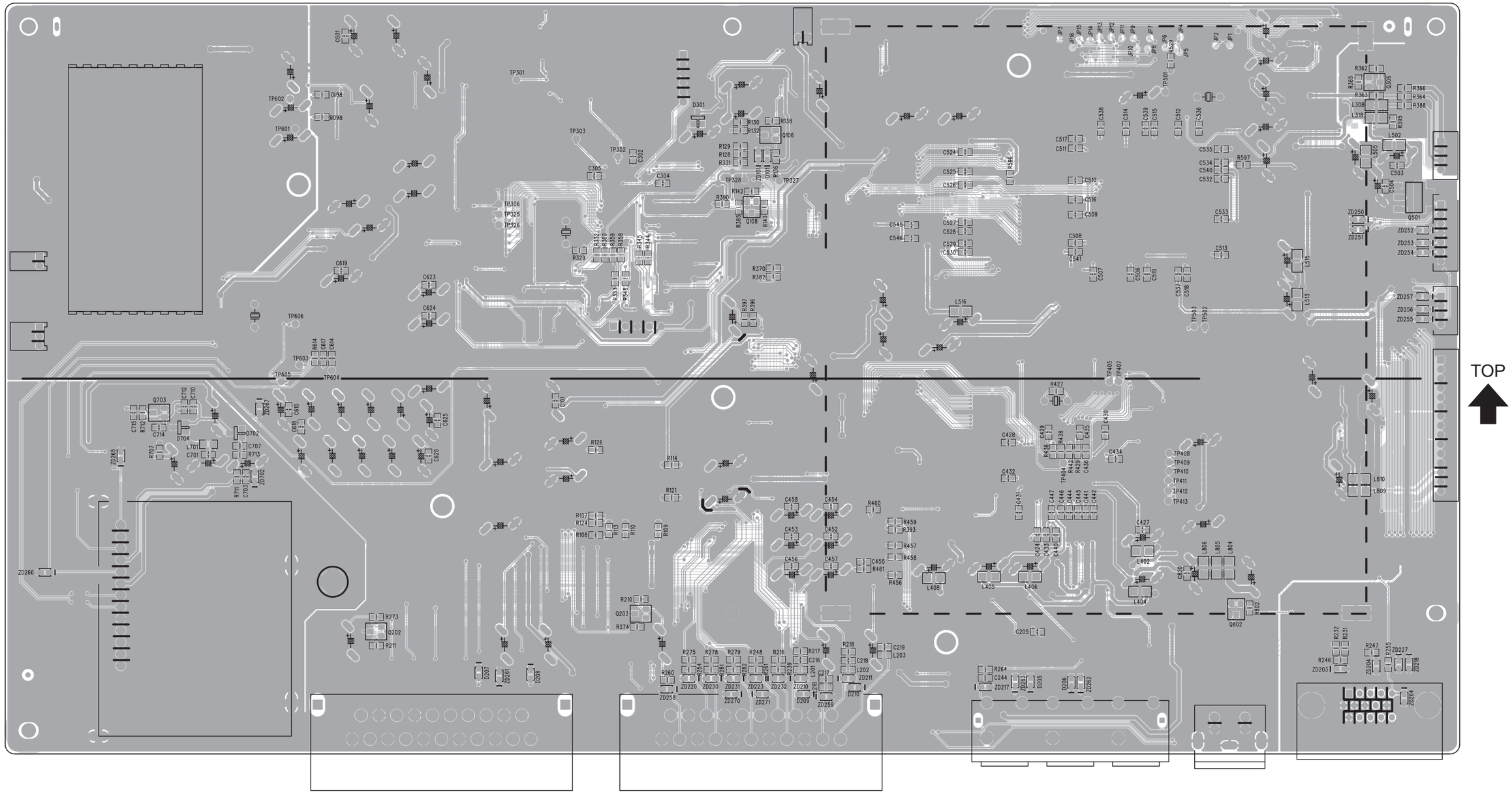


(No.YA315)2-23 2-24(No.YA315)

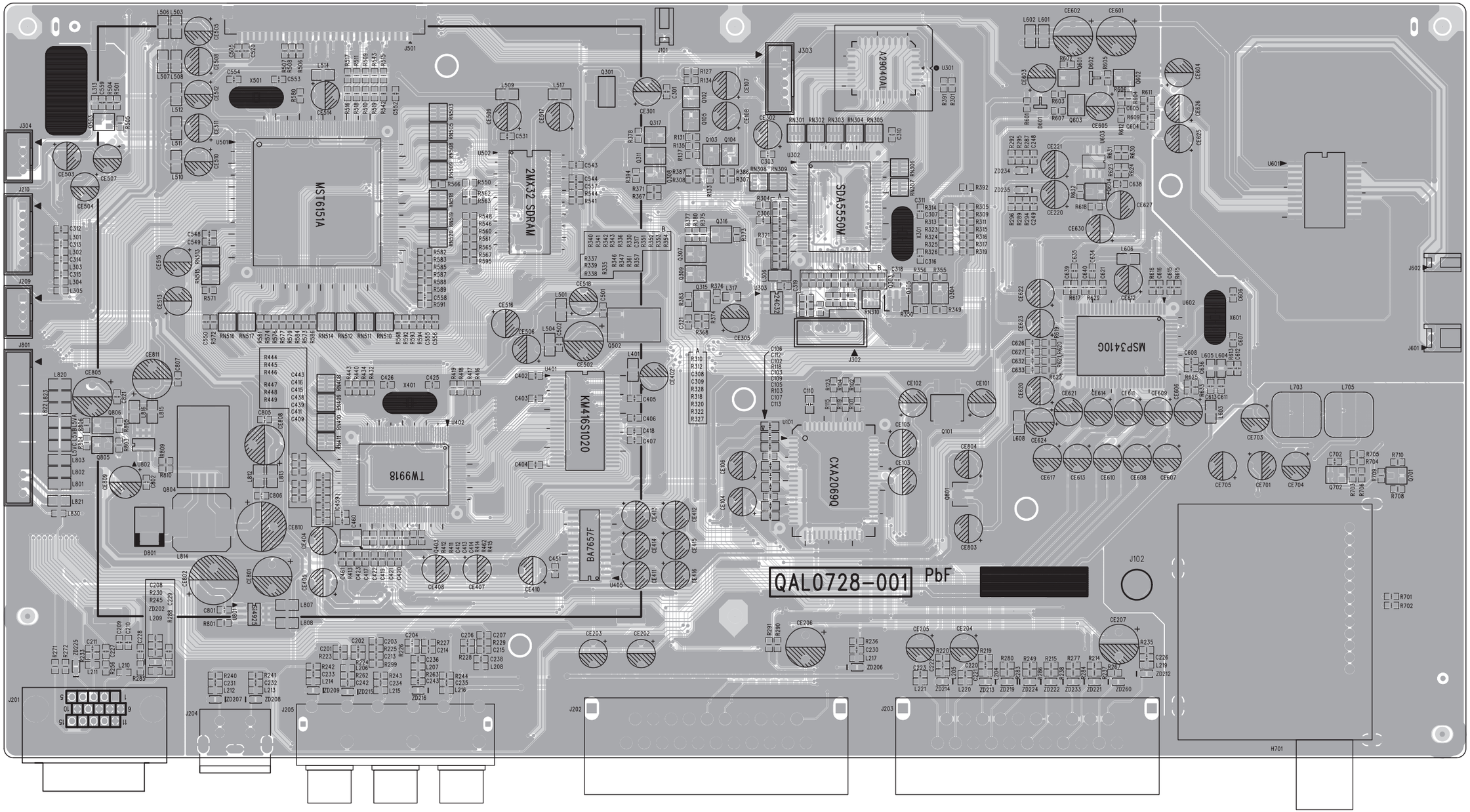
POWER PWB ASS'Y (3/3)
QAL0748-001

PATTERN DIAGRAMS

MAIN PWB PATTERN [SOLDER SIDE]

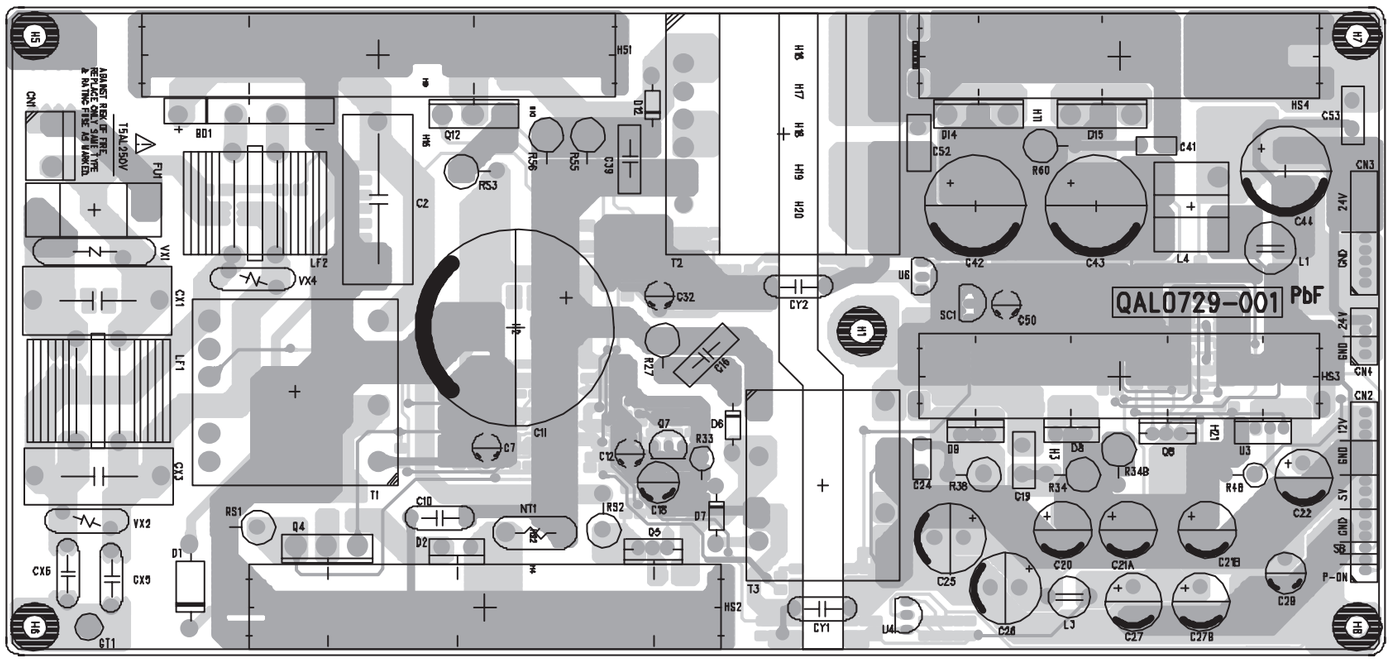


MAIN PWB PATTERN [PARTS SIDE]

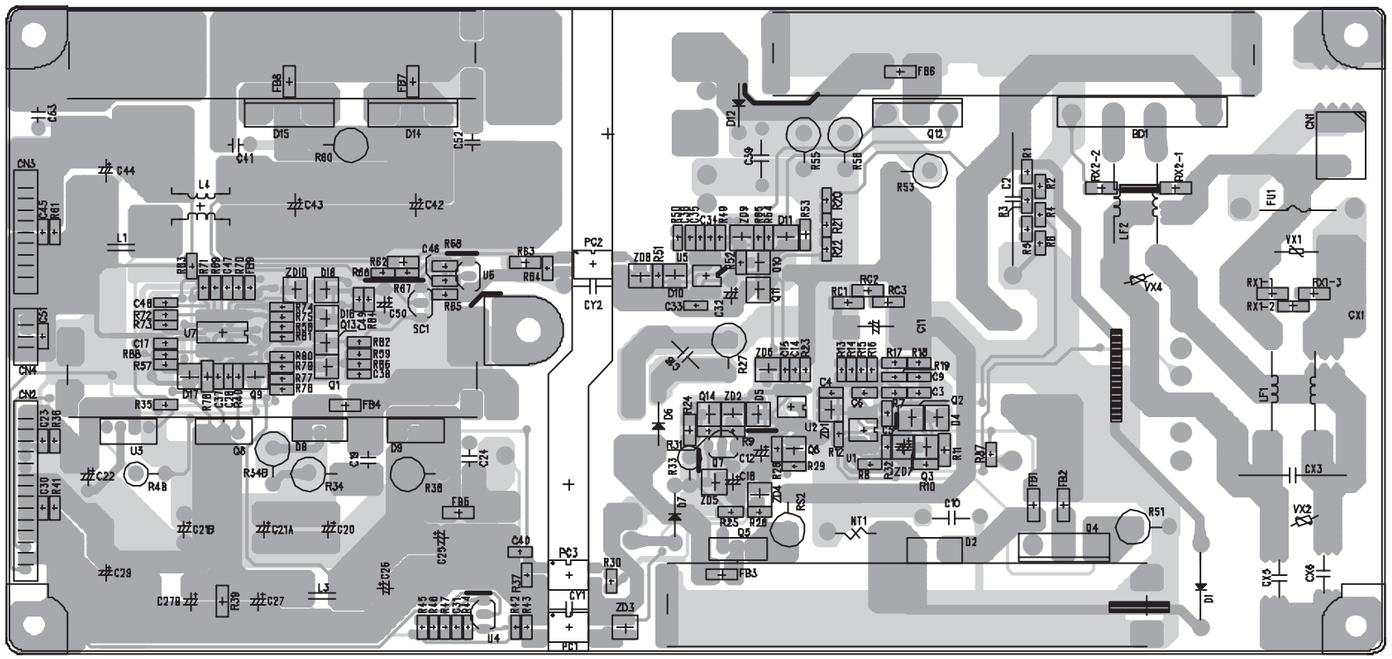


POWER PWB PATTERN [SOLDER SIDE]

TOP

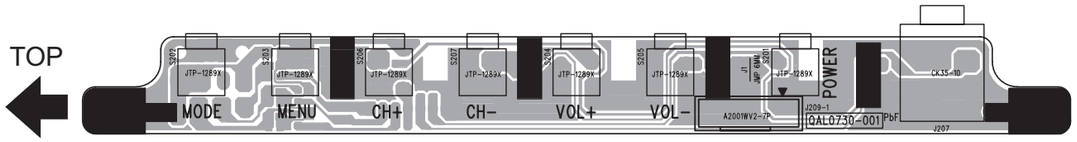


POWER PWB PATTERN [PARTS SIDE]

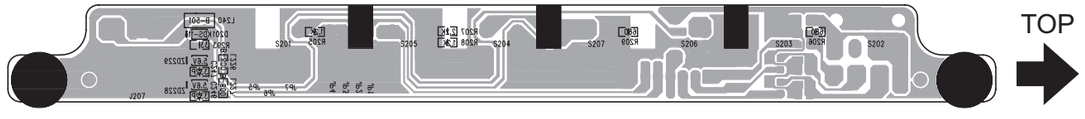


TOP

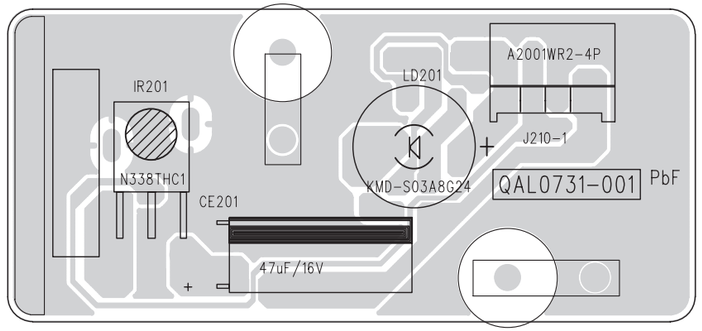
KEY PWB PATTERN [SOLDER SIDE]



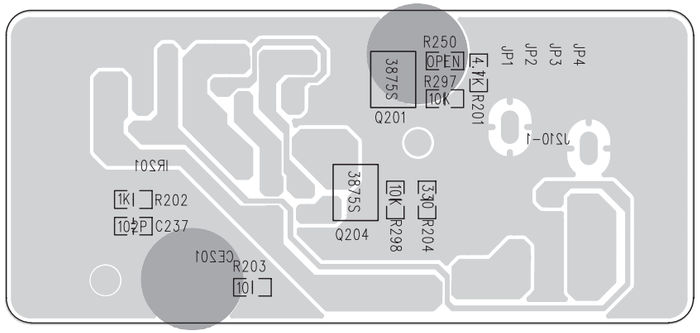
KEY PWB PATTERN [PARTS SIDE]



LED PWB PATTERN [SOLDER SIDE]



LED PWB PATTERN [PARTS SIDE]



VOLTAGE CHARTS

<MAIN PWB>

MODE PIN NO.	DC (V)
U101	
1	3.9
2	4.4
3	3.9
4	4.4
5	4.4
6	0
7	4.8
8	3.9
9	4.4
10	3.9
11	4.4
12	4.4
13	0
14	4.8
15	3.8
16	4.4
17	3.9
18	4.4
19	4.4
20	0
21	4.8
22	3.9
23	4.4
24	3.9
25	4.4
26	4.4
27	0
28	4.8
29	4.2
30	3.9
31	4.4
32	0
33	2.9
34	2.1
35	0
36	0
37	4.4
38	4.4
39	3.7
40	4.5
41	4.6
42	8.9
43	4.5
44	3.5
45	4.5
46	3.6
47	4.4
48	0
49	3.9
50	4.4
51	4.4
52	4.4
53	4.4
54	4.5
55	3.7
56	2.9
57	0
58	3.9
59	4.4
60	3.9
61	4.4
62	4.4
63	4.3
64	4.4
U301	
1	1
2	2.6
3	2.3
4	12.3
5	1.6
6	1.6
7	1.6
8	1.7
9	0.8
10	1.7
11	0.8
12	0
13	0.7
14	1.4
15	1.2
16	1.3
17	1.4
18	0
19	2.5
20	1.6
21	3.1
22	3.2
23	0.3
24	2.4
25	2.5
26	0
27	4.8
28	4.8
29	0
30	0
31	0.2

MODE PIN NO.	DC (V)
32	0.2
U302	
1	1.7
2	1.4
3	0.8
4	0.7
5	0
6	2.5
7	0
8	3.3
9	0
10	0
11	0
12	3.3
13	0
14	0
15	0
16	0
17	3.3
18	3.3
19	0
20	0
21	0.7
22	2.5
23	0
24	0
25	3.0
26	3.0
27	0
28	0
29	2.9
30	3.1
31	3.3
32	3.3
33	0
34	3.1
35	3.3
36	3.3
37	3.3
38	0
39	0
40	3.3
41	2.5
42	3.3
43	1.2
44	2.1
45	3.3
46	3.3
47	2.5
48	0
49	0
50	3.3
51	0
52	0.3
53	0.6
54	0
55	0
56	2.5
57	0.2
58	0.2
59	0.3
60	0
61	0
62	0
63	0
64	3.3
65	3.3
66	0
67	0
68	0
69	0.1
70	0
71	0.2
72	3.2
73	2.5
74	0
75	3.2
76	0
77	0.2
78	2.4
79	1
80	3.3
81	0.2
82	2.6
83	3.1
84	2.3
85	3.1
86	2.3
87	0
88	1.5
89	1.7
90	2.5
91	0
92	3.2
93	1.6
94	1.6
95	0

MODE PIN NO.	DC (V)
96	1.4
97	1.7
98	1.3
99	0.8
100	1.3
U303	
1	0
2	0
3	0
4	0
5	3.2
6	3.3
7	0
8	4.8
U401	
1	3.2
2	1.2
3	1.1
4	0
5	1.1
6	1.0
7	3.2
8	1.1
9	0
10	0
11	0.8
12	0.7
13	3.1
14	0
15	2.9
16	2.9
17	2.9
18	2.6
19	1.6
20	0.5
21	0.1
22	0.1
23	0.4
24	1.1
25	3.2
26	0
27	1.1
28	1.1
29	0.2
30	0.5
31	1.7
32	1.0
33	1.0
34	1.0
35	1.3
36	1.8
37	0.6
38	3.2
39	0
40	0.6
41	0.5
42	0.6
43	0.6
44	0.5
45	0.5
46	3.2
47	0
48	2.4
49	2.4
50	2.3
51	2.4
52	2.4
53	2.4
54	1.6
55	0
56	2.9
57	1.3
58	2.0
59	1.1
60	0
61	1.4
62	1.5
63	1.4
64	0.2
65	0.3
66	0.3
67	0.2
68	0.9
69	0
70	3.2
71	0
72	0
73	3.2
74	1.2
75	0.1
76	0.2
77	1.2
78	1.1
79	1.9
80	0.1
81	1.2
82	1.5
83	2.9
84	0
85	1.0
86	3.2
87	0
88	3.2
89	3.2
90	0
91	0
92	1.4
93	0.4
94	0.5
95	1.1
96	0
97	1.1
98	1.1
99	1.1
100	1.1
101	0.4
102	3.2
103	0
104	0.1
105	0.1
106	0.5
107	1.6
108	2.7
109	2.9
110	2.9
111	3.0
112	0
113	3.2
114	0
115	0.5
116	0.9
117	1.1
118	1.2
119	3.2
120	0
121	1.0
122	1.3
123	1.0
124	1.2
125	0.9
126	0.8
127	0.9
128	3.2

MODE PIN NO.	DC (V)
U405	
1	3.4
2	0
3	3.4
4	0
5	3.4
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	1.9
16	2.5
17	0
18	2.3
19	1.9
20	4.7
21	1.9
22	0
23	0
24	0
U501	
1	0
2	0
3	3.2
4	3.2
5	3.2
6	3.2
7	0
8	3.2
9	0
10	3.2
11	0
12	3.2
13	0
14	2.1
15	0
16	0
17	3.2
18	0.2
19	2.1
20	0
21	0.3
22	0
23	0.6
24	0.5
25	0.2
26	0
27	0.1
28	0.1
29	0
30	0
31	0
32	0
33	0.3
34	3.2
35	0
36	2.1
37	2.2
38	0.2
39	0
40	0
41	0.4
42	0.4
43	0.4
44	0.4
45	0.7
46	0.5
47	0.8
48	2.4
49	1.7
50	0
51	2.8
52	2.2
53	1.6
54	1.3
55	1.0
56	1.0
57	1.0
58	1.7
59	0.9
60	0.9
61	0.4
62	0
63	1.7
64	0
65	0
66	3.2
67	0
68	2.2
69	0
70	3.3
71	3.3

MODE PIN NO.	DC (V)
72	0
73	0
74	0
75	3.3
76	2.3
77	3.1
78	1.6
79	1.7
80	0
81	0
82	0.2
83	0.3
84	0.2
85	0.4
86	2.5
87	0
88	0.3
89	0.4
90	0.3
91	0.3
92	0.6
93	0.4
94	0.4
95	0.3
96	0.4
97	0.3
98	0.4
99	0.3
100	0
101	0
102	2.5
103	0
104	1.8
105	2.5
106	1.4
107	1.3
108	0
109	3.2
110	1.2
111	1.4
112	0
113	2.5
114	0
115	2.0
116	2.4
117	0.2
118	1.0
119	0.2
120	1.0
121	1.1
122	1.0
123	1.0
124	1.4
125	2.5
126	0
127	0
128	0
129	0
130	0
131	1.7
132	0
133	0
134	0
135	0.2
136	0.2
137	0.3
138	0.7
139	2.4
140	0
141	0.4
142	0.2
143	0.3
144	0.2
145	0.3
146	0.3
147	0.3
148	0.2
149	0.3
150	0.3
151	0.2
152	0.3
153	0
154	2.4
155	0
156	1.7
157	0
158	3.1
159	0
160	1.0
161	1.3
162	3.2
163	0
164	1.2
165	1.2
166	1.1
167	1.3
168	1.1

MODE PIN NO.	DC (V)
169	1.3
170	1.1
171	1.3
172	0
173	1.7
174	0
175	0
176	0
177	0
178	0
179	0
180	0
181	0
182	3.2
183	0
184	0
185	1.7
186	0
187	0
188	0
189	0
190	0
191	0
192	0
193	0
194	0
195	1.7
196	0
197	0
198	0
199	0
200	0.3
201	1.6
202	1.6
203	1.3
204	3.2
205	0
206	0
207	3.2
208	3.2
U502	
1	3.2
2	0.4
3	3.2
4	0.3
5	0.3
6	0
7	0.4
8	0.4
9	3.2
10	0.3
11	0.4
12	0
13	0.3
14	0
15	3.2
16	0
17	2.3
18	1.9
19	2.5
20	0
21	0
22	1.4
23	1.3
24	0
25	0.3
26	0
27	0.3
28	0
29	3.2
30	0
31	0.4
32	0
33	0.4
34	0.3
35	3.2
36	0.4
37	0.3
38	0
39	0.4
40	0.3
41	3.2
42	0.6
43	3.1
44	0
45	0.3
46	0
47	0.2
48	0.3
49	3.2
50	0.2
51	0.4
52	0
53	0.3
54	0.3
55	3.2
56	0.3

MODE PIN NO.	DC (V)
57	0
58	0
59	0
60	1.0
61	1.0
62	1.0
63	0.9
64	1.2
65	0
66	0
67	2.5
68	1.3
69	0
70	0
71	0
72	0
73	0
74	0.3
75	3.2
76	0.3
77	0.4
78	0
79	0.4
80	0.7
81	3.2
82	0.2
83	0.4
84	0
85	0.3
86	0
U603	
6	12.0
7	1.5
8	4.8
9	2.4
10	0
11	0
12	0
13	0
14	1.5
15	12.0
16	6.0
17	0
18	0
19	6.0
20	0
U602	
1	0
2	2.8
3	2.0
4	2.2
5	2.3
6	4.6
7	0.2
8	0.2
9	0.2
10	0.2
11	4.7
12	4.6
13	4.7
14	0
15	0
16	0
17	0.2
18	0
19	0
20	0
21	3.2
22	0
23	0
24	0
25	0
26	0
27	0
28	0
29	0
30	0.1
31	0
32	0
33	3.7
34	3.7
35	0
36	3.7
37	3.7
38	7.0
39	8.0
40	7.0
41	0
42	0
43	0
44	0
45	3.7

MODE PIN NO.	DC (V)
46	0
47	3.7
48	3.7
49	0
50	3.7
51	3.7
52	0
53	3.7
54	3.7
55	0
56	3.7
57	3.7
58	2.6
59	0
60	3.8
61	0
62	0
63	0
64	0
65	4.7
66	4.7
67	1.5
68	1.5
69	0
70	0
71	2.2
72	2.2
73	0
74	2.4
75	0
76	0
77	0
78	0
79	0
80	3.3
U801	
1	12.0
2	0
3	12.0
4	0
5	12.0
6	12.1
7	12.1
8	12.0
U802	
1	4.8
2	0
3	4.8
4	0
5	4.7
6	4.7
7	4.7
8	4.7
Q101	
1	12.0
2	0
3	8.9
Q102	
E	4.1
C	1.8
B	2.3
Q103	
E	0
C	4.4
B	0
Q104	
E	0
C	0
B	0
Q105	
E	4.8
C	1.2
B	1.8
Q106	
E	4.1
C	4.8
B	4.7
Q108	
E	0
C	0
B	0.6
Q202	
E	3.6
C	8.9
B	4.6

MODE PIN NO.	DC (V)
Q203	
E	2.7
C	8.9
B	3.4
Q301	
1	0
2	3.3
3	4.8
Q303	
1	3.3
2	0
3	3.3
Q304	
S	3.2
D	2.1
G	2.8
Q305	
S	3.3
D	1.5
G	2.0
Q306	
E	0
C	4.0
B	0
Q307	
E	0
C	0
B	2.6
Q308	
E	0
C	3.3
B	-0.2
Q309	
E	0.1
C	2.0
B	0
Q311	
E	0
C	3.3
B	0
Q315	
E	0.7
C	0
B	0
Q316	
E	4.4
C	2.8
B	0
Q317	
E	0
C	0
B	2.5
Q403	
E	0.7
C	0
B	0
Q501	
1	0
2	1.8
3	3.2
Q502	
1	3.2
2	0
3	2.3
Q503	
E	0
C	2.3
B	0.2
Q601	
E	11.8
C	-0.2
B	11.9
Q602	
E	0
C	4.8
B	0
Q603	
E	0
C	2.3
B	0
Q604	
E	0.3
C	4.7
B	0
Q701	
E	1.8
C	4.6
B	2.4
Q702	
E	0.9
C	4.7
B	1.4
Q703	
E	0
C	4.6
B	0.3

MODE PIN NO.	DC (V)
Q801	
1	8.0
2	0
3	12.0
Q802	
E	0
C	0
B	0.7
Q804	
1	4.8
2	3.4
3	0
4	3.2
5	0
Q805	
E	0
C	4.1
B	0
Q806	
E	0
C	0
B	0.5
H701	
1	NC
2	NC
3	NC
4	NC
5	0
6	0
7	0
8	3.6
9	0
10	2.8
11	2.1
12	4.6
13	0
14	5.7
15	2.4
16	2.0
17	1.5

<LED BOARD SW PWB>

MODE PIN NO.	DC (V)
IR201	
IR	3.1
VC	4.8
G	0
Q201	
E	0
C	1.8
B	0
Q204	
E	0
C	0
B	0.7+

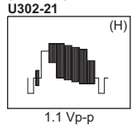
<POWER PWB>

MODE PIN NO.	DC (V)
U1	
1	2.5
2	6.0
3	1.4
4	0
5	3.1
6	-0.1
7	5.0
8	14.1
U2	
1	0
2	1.0
3	0.1
4	0
5	1.7
6	14.2
7	0
8	200.7
U3	
1	13.6
2	12.0
3	0
4	13.6
U4	
1	2.4
2	0
3	3.7
U5	
1	0.5
2	1.5
3	0
4	0
5	2.1
6	14.1
7	0
8	1.2

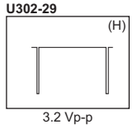
MODE PIN NO.	DC (V)
U6	
1	2.5
2	0
3	21.3
U7	
1	0
2	0
3	13.6
4	0.6
5	0.5
6	5.0
7	45.0
8	0
9	0
10	2.1
11	0.6
12	0
13	0
14	0
Q1	
E	0
C	0
B	0.6
Q2	
E	5.2
C	14.1
B	5.0
Q3	
E	5.2
C	0
B	5.0
Q4	
S	0
D	202.6
G	4.5
Q5	
S	0
D	386.1
G	1.2
Q6	
E	14.2
C	14.1
B	13.5
Q7	
E	14.2
C	15.4
B	14.9
Q8	
S	13.6
D	5.0
G	4.8
Q9	
E	0
C	13.6
B	0
Q10	
E	1.9
C	14.1
B	2.0
Q11	
E	1.9
C	0
B	2.1
Q12	
S	0
D	386.3
G	1.6
Q13	
E	5.0
C	5.0
B	4.1
Q14	
E	0
C	14.9
B	-1.5

WAVEFORMS

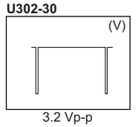
MAIN PWB (1/4)
(SHEET1)

U302-21


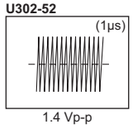
1.1 Vp-p

U302-29


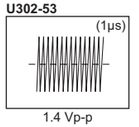
3.2 Vp-p

U302-30


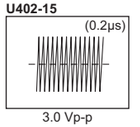
3.2 Vp-p

U302-52


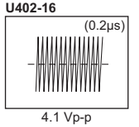
1.4 Vp-p

U302-53


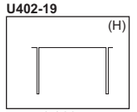
1.4 Vp-p

U402-15


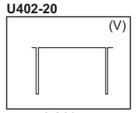
3.0 Vp-p

U402-16


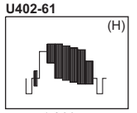
4.1 Vp-p

U402-19


3.2 Vp-p

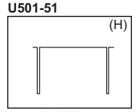
U402-20


3.2 Vp-p

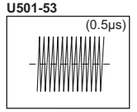
U402-61


1.0 Vp-p

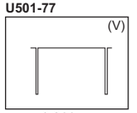
MAIN PWB (2/4)
(SHEET2)

U501-51


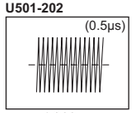
3.2 Vp-p

U501-53


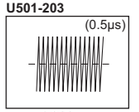
4.2 Vp-p

U501-77


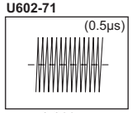
3.2 Vp-p

U501-202


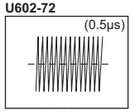
4.9 Vp-p

U501-203


4.0 Vp-p

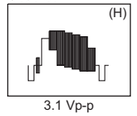
U602-71


2.6 Vp-p

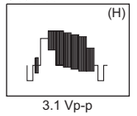
U602-72


3.4 Vp-p

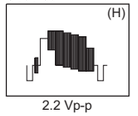
MAIN PWB (3/4)
(SHEET3)

U101-41


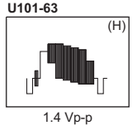
3.1 Vp-p

U101-44


3.1 Vp-p

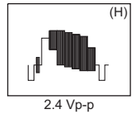
U101-53


2.2 Vp-p

U101-63


1.4 Vp-p

MAIN PWB (4/4)
(SHEET4)

H701-17


2.4 Vp-p

JVC

Victor Company of Japan, Limited
AV & MULTIMEDIA COMPANY DISPLAY CATEGORY 12, 3-chome, Moriya-cho, Kanagawa-ku, Yokohama-city, Kanagawa-prefecture, 221-8528, Japan

(No.YA315)

Printed in Japan
VPT

JVC

ENGLISH
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NEDERLANDS
CASTELLANO
ITALIANO
PORTUGUÊS

InteríArt

LT-32A60BU
LT-32A60SU
LT-26A60BU
LT-26A60SU

T-V LINK

WIDE LCD PANEL TV — INSTRUCTIONS

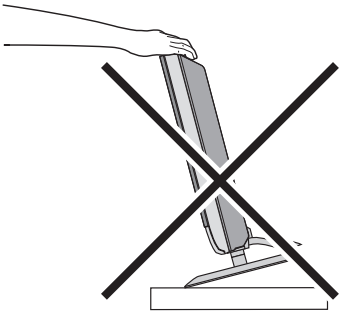
16:9 LCD TV	BEDIENUNGSANLEITUNG
TELEVISEUR A ECRAN LCD PANORAMIQUE	MANUEL D'INSTRUCTIONS
BREEDBEELD LCD TV	GEBRUIKSAANWIJZING
TELEVISOR CON PANEL LCD PANORÁMICO	MANUAL DE INSTRUCCIONES
TV LCD WIDESCREEN	ISTRUZIONI
TELEVISOR COM ECRÃ PANORÂMICO DE CRISTAL LÍQUIDO	INSTRUÇÕES

Thank you for buying this JVC LCD flat television.
To make sure you understand how to use your new TV, please read this manual thoroughly before you begin. ("LCD" stands for Liquid Crystal Display.)

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

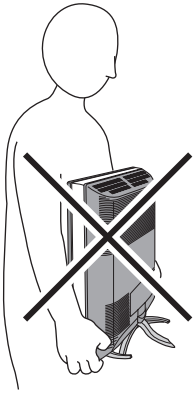
WARNING

- The TV may fall causing injuries. Hold the bottom of the stand with your hand and tilt the TV up and down.
- Do not allow children to hang from the TV, place their elbows on the TV or lean against the TV. Doing so may cause the TV to fall over and lead to injuries.



CAUTION

- The TV screen may be damaged if the TV is carried as shown in the diagram below.
  The TV should always be carried by two people.

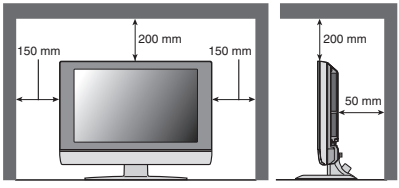


Pixel defects

LCDs use collections of fine points ("pixels") to display images. While there is no problem with more than 99.99% of these pixels, please understand that a very small number of pixels may not light, or may light all the time.

Distance recommendations

Avoid improper installation and never position the unit where good ventilation is impossible.
When installing this TV, distance recommendations must be maintained between the set and the wall, as well as inside a tightly enclosed area or piece of furniture.
Keep to the minimum distance guidelines shown for safe operation.



Failure to take the following precautions may cause damage to the television or remote control.

DO NOT block the TV's ventilation openings or holes.
(If the ventilation openings or holes are blocked by a newspaper or cloth, etc., the heat may not be able to get out.)

DO NOT place anything on top of the TV.
(such as cosmetics or medicines, flower vases, potted plants, cups, etc.)

DO NOT allow objects or liquid into the cabinet openings.
(If water or liquid is allowed to enter this equipment, fire or electric shock may be caused.)

DO NOT place any naked flame sources, such as lighted candles, on the TV.

DO NOT subject the TV to direct sunlight.

The surface of the TV screen is easily damaged. Be very careful with it when handling the TV. Should the TV screen become soiled, wipe it with a soft dry cloth. Never rub it forcefully. Never use any cleaner or detergent on it.

If there is a fault, unplug the unit and call a service technician. Do not attempt to repair it yourself or remove the rear cover.

■ Cleaning the screen

The screen is coated with a special thin film to reduce reflection. If this film is damaged, uneven colors, discoloration, scratches, and other problems that cannot be repaired may occur. Pay attention to the following when handling the screen.

- Do not use glue or adhesive tape on the screen.
- Do not write on the screen.
- Do not allow the screen to come in contact with any hard objects.
- Do not allow condensation to form on the screen.
- Do not use alcohol, thinner, benzene or other solvents on the screen.
- Do not rub the screen hard.

CAUTION:

- Operate only from the power source specified (AC 110 – 240 V, 50/60 Hz) on the unit.
- Avoid damaging the AC plug and power cord.
- When you are not using this unit for a long period of time, it is recommended that you disconnect the power cord from the main outlet.

CONTENTS

Setting up your TV 4
- Installation 4
- Using the stand 4
- Removing the terminal cover 5
- Connecting the aerial and video cassette recorder (VCR) 6
- Connecting the power cord to the AC outlet 7
- Putting the batteries into the remote control 7
- Initial settings 7
- T-V LINK functions 10

TV buttons and functions 12
- Turn the TV on from standby mode 12
- Choose a TV channel 12
- Watch images from external devices 12
- Adjust the volume 13
- Using the Menu 13

Remote control buttons and functions 14
- Turn the TV on or off from standby mode 14
- Choose a TV channel and watch images from external devices 15
- Adjust the volume 16
- Information function 16
- ZOOM function 17
- 3D SOUND function 18
- Return to TV channel instantly 18
- Favourite channel function 19
- Operating a JVC brand VCR or DVD player 20

Teletext function 21
- Basic operation 21
- Using the List Mode 21
- Hold 22
- Sub-page 22
- Reveal 22
- Size 22
- Index 23
- Cancel 23

Using the TV's menu 24
- Basic operation 24

PICTURE menu 25
- PICTURE MODE 25
- BRIGHT-1 25
- CONTRAST 25
- BRIGHT-2 25
- SHARP 25
- COLOUR 25
- HUE 25
- COLOUR TEMP. 25
- FEATURES 26

SOUND menu 28
- STEREO / I • II 28
- BASS 28
- TREBLE 28
- BALANCE 28
- 3D SOUND 28

FEATURES menu 29
- SLEEP TIMER 29
- CHILD LOCK 29
- APPEARANCE 30
- BLUE BACK 30
- FAVOURITE SETTING 31

SET UP menu 32
- AUTO PROGRAM 32
- EDIT/MANUAL 32
- LANGUAGE 36
- DECODER (EXT-2) 36
- EXT SETTING 37

Displaying a computer screen 40
- Connecting to the computer 40
- Watching images from a computer 40
- Table of signals for each type of computer 40

Additional preparation 41
- Connecting external equipment 41

CH/CC numbers 44

Troubleshooting 46

Specifications 49

Setting up your TV

- When you install the TV on the wall, only use a JVC wall mounting unit (optional) which is designed for this TV.
- Make sure that the TV is installed on the wall by a skilled installer.

Installation

Cautions for installation

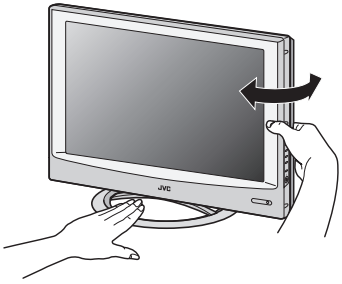
- Install the TV in a corner on a wall or on the floor so as to keep cords out of the way.
- The TV will generate a slight amount of heat during operation. Ensure that sufficient space is available around the TV to allow satisfactory cooling. See “Distance recommendations” on page 1.

Using the stand

This TV comes with a table top stand already attached.
This stand can be used to adjust the direction of the TV screen to the left or right.

■ Rotate the TV to the left and right:

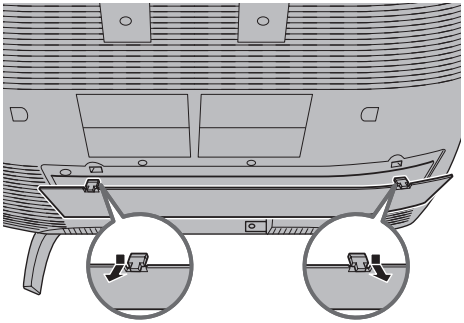
While holding the bottom of the stand with one hand, use your other hand to hold the edge of the panel and slowly adjust the direction of the TV screen.



Removing the terminal cover

There are connection terminals behind the cover on the rear of the TV. Remove the cover before connecting an antenna or VCR.

Remove the cover by removing the hooks. When replacing the cover, place the side of the cover against the TV and insert the hooks.



- Leave the cover off if they do not fit properly. Do not force to replace the cover. Doing so may cause damage to the connection cables and the cover.

Connecting the aerial and video cassette recorder (VCR)

- The connecting cables are not provided.
- For further details, refer to the manuals provided with the devices to be connected.

Caution

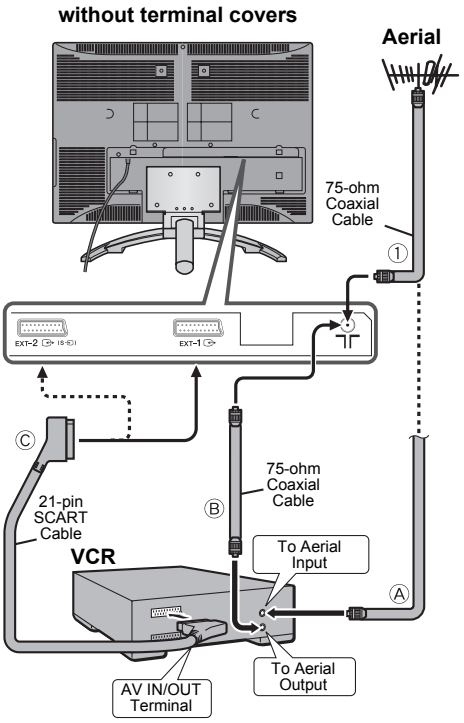
- Turn off all the equipment including the TV before connecting anything.

■ **If you are connecting a VCR, follow Ⓐ → Ⓑ → Ⓒ in the diagram opposite.**

■ **If you are not connecting a VCR, follow ①.**

To use the T-V LINK functions, you must have a T-V LINK compatible VCR connected by a SCART cable Ⓒ to the EXT-2 terminal on the TV. For details about T-V LINK functions, see "T-V LINK functions" on page 10.

- You can watch a video using the VCR without doing Ⓒ. For details, see your VCR instruction manual.
- To connect more equipment, please see "Connecting external equipment" on page 41.
- If you connect a decoder to a T-V LINK compatible VCR, set the DECODER (EXT-2) function to ON. For details, see "DECODER (EXT-2)" on page 36. Otherwise, you will not be able to watch scrambled channels.



Connecting the power cord to the AC outlet

Insert the AC plug on the power cord from the TV into an AC outlet.

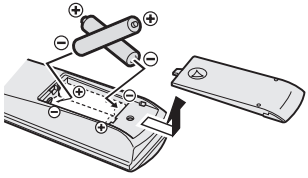
Caution

- Operate only from the power source specified (AC 110 – 240 V, 50/60 Hz) on the unit.

- Remove the AC plug from the outlet to completely disconnect the TV from the power supply.

Putting the batteries into the remote control

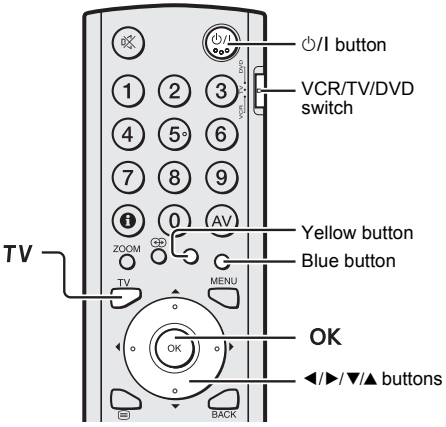
Use two AA/R6 dry cell batteries.
Insert the batteries from the ⊖ end, making sure the ⊕ and ⊖ polarities are correct.



- Follow the warnings printed on the batteries.
- Battery life is about six months to one year, depending on how much you use the remote control.
- The batteries we supply are only for setting up and testing your TV, please replace them as soon as you need to.
- If the remote control does not work properly, replace the batteries.

Initial settings

When the TV is first turned on, it goes into the initial settings mode, and you will see the JVC logo. Follow the instructions on the screen display to make the initial settings.



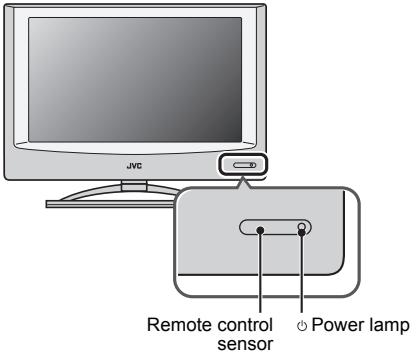
1 Make sure to set the VCR/TV/DVD switch on the remote control to the TV position

- You cannot turn the TV on when the VCR/TV/DVD switch is set to the VCR or DVD position.

2 Press the ⏻/I button on the remote control

The TV turns on from standby mode and the JVC logo is displayed.

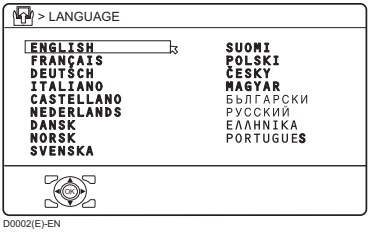
- Check that the AC plug on the power cord from the TV is connected to AC outlet.



- If the JVC logo does not appear this is because your TV has already been turned on for the first time: use the “LANGUAGE” and “AUTO PROGRAM” functions to make the initial settings. For details, see “SET UP menu” on page 32.

3 Press the OK button

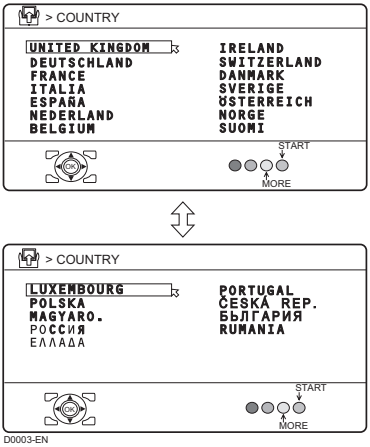
The LANGUAGE menu appears.



D0002(E)-EN

4 Press the ▼/▲ buttons to choose ENGLISH. Then press the OK button

The on-screen display will then be in English.
The COUNTRY menu appears as a sub-menu of the AUTO PROGRAM function. There are two COUNTRY menus. Pressing the yellow button changes the COUNTRY menu as follows:

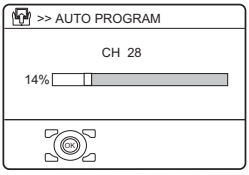


D0003-EN

5 Press the ◀/▶ and ▼/▲ buttons to choose the country where you are

6 Press the blue button to start the AUTO PROGRAM function

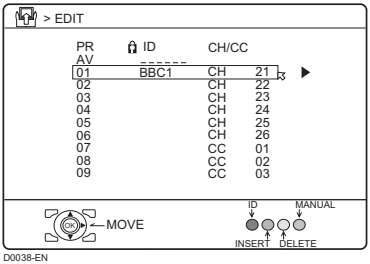
The AUTO PROGRAM menu appears and received TV channels are automatically stored in the programme numbers (PR).



D0004-EN

- To cancel the AUTO PROGRAM function:
  Press the TV button.

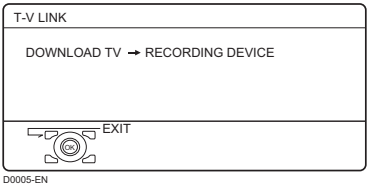
After the TV channels have been registered in the programme numbers (PR), the EDIT menu appears



D0038-EN

- If you want to, you can now edit the programme numbers (PR) using the EDIT/MANUAL function. For details, see “EDIT/MANUAL” on page 32.
- If you do not want to edit programme numbers (PR), go to the next step.

7 Press the OK button to display the T-V LINK menu



D0005-EN

If you do not have a T-V LINK compatible VCR connected:
Press the **TV** button to exit the T-V LINK menu.
The T-V LINK menu disappears.

If you have a T-V LINK compatible VCR connected to the EXT-2 terminal:
Follow the operating procedure "Downloading the data to VCR" on page 10 to transmit the Programme number (PR) data.

Now, the initial settings are complete, and you can watch the TV

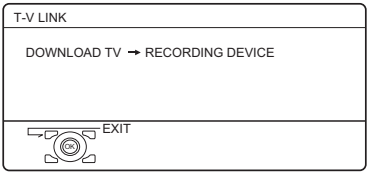
- If your TV can detect the TV channel name from the TV channel broadcast signal, the TV channel name is assigned to the programme number (PR) to which the TV channel has been set. However, which TV channels are set to which programme numbers (PR) will depend on the area in which you live.
- If a TV channel you want to view is not set to a programme number (PR), you can set it using the MANUAL function. For details, see "EDIT/MANUAL" on page 32.
- The AUTO PROGRAM function does not set the programme number PR 0 (AV) for your video cassette recorder. You will need to set this using the MANUAL function.

■ Downloading the data to VCR

You can transmit to the latest Programme numbers (PR) data to a VCR with the T-V LINK function.

Caution

- This only works when a T-V LINK compatible VCR is connected to the EXT-2 terminal.
- This only works when the T-V LINK menu is being displayed.

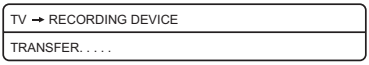


D0005-EN

1 Turn on the VCR

2 Press the OK button

The data transmission begins.



D0037-EN

The T-V LINK menu disappears once the data transmission ends.

When the T-V LINK menu is changed over to another menu:
The TV has finished its menu. This new menu is operated from the VCR. See the VCR instruction manual for what to do next.

If "FEATURE NOT AVAILABLE" appears at the T-V LINK menu:
Check the following three items. Then press the ◀ button to retry data transmission.

- Has a T-V LINK compatible VCR been connected to the EXT-2 terminal?
- Has the VCR power been turned on?
- Does the SCART cable that is connected to the EXT-2 terminal to T-V LINK compatible VCR have all its proper connections?

T-V LINK functions

When you have a T-V LINK compatible VCR connected to the EXT-2 Terminal on the TV, it is easier to set up the VCR and to view videos. T-V LINK uses the following features:

To use T-V LINK functions:
A "T-V LINK compatible VCR" means a JVC video cassette recorder with the T-V LINK logo, or with one of the following logos. However, these VCRs may support some or all of the features described earlier. For details, see your VCR instruction manual.

"Q-LINK" (a trademark of Panasonic Corporation)
"Data Logic" (a trademark of Metz Corporation)
"Easy Link" (a trademark of Phillips Corporation)
"Megalogic" (a trademark of Grundig Corporation)
"SMARTLINK" (a trademark of Sony Corporation).

■ Pre-set download

The VCR will automatically download the registered data on the TV channels from the TV. This means you do not need to set up the program channels on your VCR manually. The preset download function automatically begins when the initial setting is complete or whenever you carry out the AUTO PROGRAM or EDIT/MANUAL functions.

You can also carry out this function using your VCR controls.

When "FEATURE NOT AVAILABLE" is displayed:

If "FEATURE NOT AVAILABLE" is displayed, the download was not performed correctly. Before trying to download again, check that:

- the VCR power is turned on
- the VCR is T-V LINK compatible
- the VCR is connected to the EXT-2 terminal
- the SCART cable is fully wired.

■ Direct Rec

"What You See Is What You Record"

You can easily record to VCR the images that you are watching on the TV.

For details, read the manual for your VCR. Use your VCR controls. "DEVICE IS RECORDING" is displayed.

In the following situations, the VCR will stop recording if the TV is turned off, if the TV channel or input is changed, or if the menu is displayed on the TV:

- when recording images from an external device connected to the TV (for example a camcorder)
- when recording a TV channel after it has been unscrambled on a decoder
- when recording a TV channel by using the TV's output because the VCR's own tuner cannot properly receive that channel.

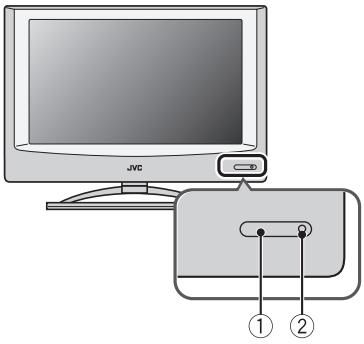
You cannot carry out Direct Rec using your TV's control.
Generally, the VCR cannot record a TV channel that it cannot receive properly on its own tuner, even if you can view that TV channel on the TV. However, some VCRs can record a TV channel by using the TV's output if that channel can be viewed on the TV. For details, see your VCR instruction manual.

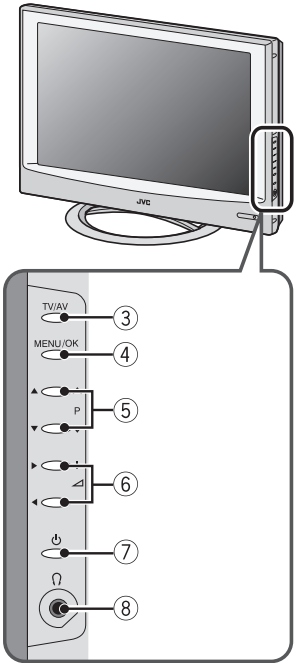
When the VCR is not ready, the following messages are displayed.

ERROR MESSAGE	Cause and countermeasure
NO RECORDING	The VCR is not able to record. Check the VCR.
NO RECORDING POSSIBLE	The TV input is set to EXT-4 or PC. Since the EXT-4 picture or PC picture cannot be output to EXT-2, DIRECT REC is not possible.
NO RECORDING, MEDIA PROBLEM	The recording device is not ready to record. Check the VCR tape.
NO RECORDING, DEVICE BUSY	The recording device cannot record as it is recording or playing. Check the VCR.

Refer to the VCR instruction manual.

TV buttons and functions





Refer to the pages in parentheses for details.

① Remote control sensor
② Power lamp (page 7)
③ TV/AV button (page 12)
④ MENU/OK button (pages 13, 24)
⑤ P ∨/∧ buttons (page 12)
⑥ ◿ (Volume) −/+ buttons (page 13)
⑦ ⏻ (Stand by) button (page 12)
⑧ Headphone jack (mini jack) (page 41)

Turn the TV on from standby mode

Press the ⏻ button or the P ∨/∧ buttons to turn the TV on from standby mode.
When the TV is turned on, the power lamp lights blue.

To turn the TV off:
Press the ⏻ button again.
The power lamp goes off.

Caution

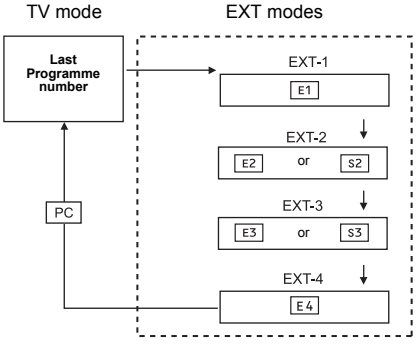
- The ⏻ button on the TV does not fully isolate the TV from the AC supply. If you are not going to use the TV for a long period, be sure to disconnect the AC plug from the AC socket.

Choose a TV channel

Press the P ∨/∧ buttons to choose a programme number (PR) or an EXT terminal

Watch images from external devices

Press the TV/AV button to choose an EXT terminal



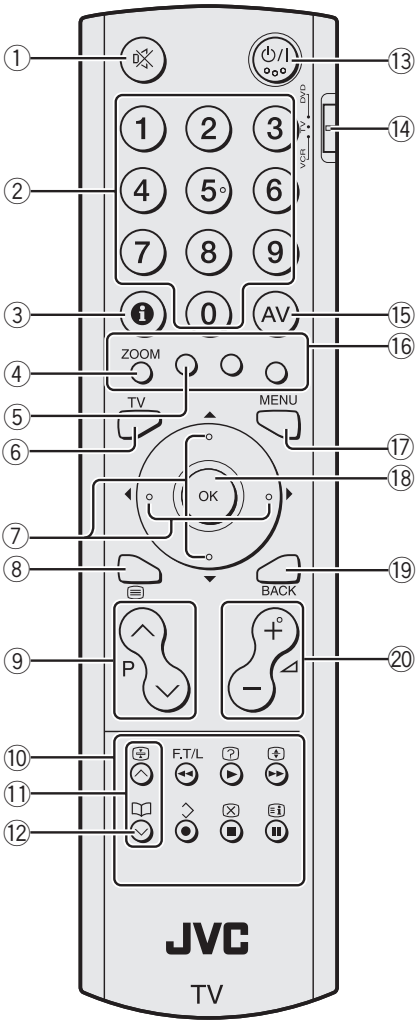
Adjust the volume

Press the ◿ (Volume) −/+ buttons
The volume level indicator appears.

Using the Menu

Use the MENU/OK button
Refer to “Using the TV’s menu” (see page 24) for details of using the menu.

Remote control buttons and functions



① Muting button
② Number buttons
③ Information button
④ **ZOOM** button
⑤ ⊛ button
⑥ ***TV*** button
⑦ ◄/►/▼/▲ buttons
⑧ ☰ (Text) button
⑨ **P** ∨/∧ buttons
⑩ VCR/DVD/Teletext control buttons
⑪ ∨/∧ buttons
⑫ 🕮 (Favourite) button
⑬ ⏻/**I** (Standby) button
⑭ VCR/TV/DVD switch
⑮ **AV** button
⑯ Colour buttons
⑰ **MENU** button
⑱ **OK** button
⑲ **BACK** button
⑳ ◿ (Volume) −/+ buttons

Turn the TV on or off from standby mode

Press the ⏻/I (standby) button to turn the TV on or off

When the TV is turned on, the power lamp lights blue.

- The power can be turned on by pressing the ***TV*** button, **P** ∨/∧ buttons or Number buttons.

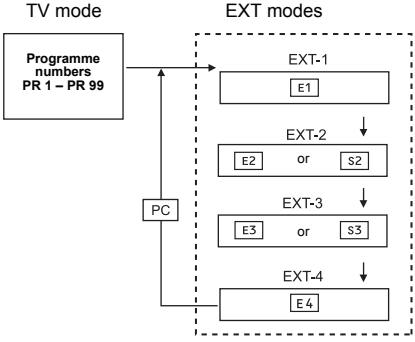
To turn the TV on or off, set the VCR/TV/DVD switch on the remote control to the TV position and press the ⏻/**I** button.
If the VCR/TV/DVD switch on the remote control is set to a position other than TV, the TV will not be turned on or off even if the ⏻/**I** button is pressed.

Choose a TV channel and watch images from external devices

■ **Use the number buttons:**
Enter the programme number (PR) of the channel using the number buttons.
Example:
- PR 6 → press **6**
- PR 12 → press **1** and **2**

■ **Use the P ∨/∧ buttons:**
Press the P ∨/∧ buttons to choose the programme number (PR) you want or an EXT terminal.

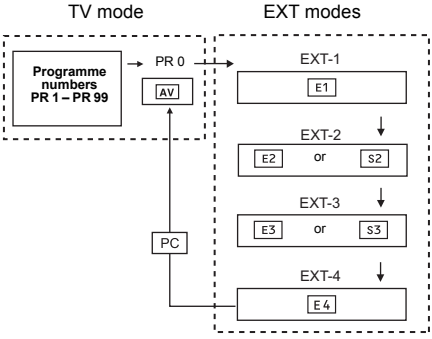
■ **Use the AV button:**
Press the AV button to choose an EXT terminal.



- You can choose a video input signal from the S-VIDEO signal (Y/C signal) and regular video signal (composite signal). For details, see "S-IN (S-VIDEO input)" on page 37.
- If you do not have a clear picture or no colour appears, change the colour system manually. See "COLOUR SYSTEM" on page 26.
- If you choose an EXT terminal with no input signal, the EXT terminal number becomes fixed on the screen.
- Since this TV is designed to make full use of the resolution of the original video source, the motion may appear unnatural when the video source is input with progressive-scanning component signals. If this happens, change the output setting of the connected device to interlace-scanning component signal output. See the instructions that came with the device for more information.
- The PC sound is the same as the EXT-3 sound.

To return to a TV channel:
Press the **TV** button, the ▼/▲ buttons or the number buttons.

To use the programme number PR 0 (AV):
When the TV and VCR are connected only by the aerial cable, choosing the programme number PR 0 (AV) allows you to view images from the VCR. Set the VCR RF channel to the programme number PR 0 (AV) manually. For details, see "EDIT/MANUAL" on page 32.
Pressing the **AV** button changes the choice as follows:



- The VCR sends its playback image along the aerial cable as an RF (radio frequency) signal.
- Also see your VCR instruction manual.

Adjust the volume

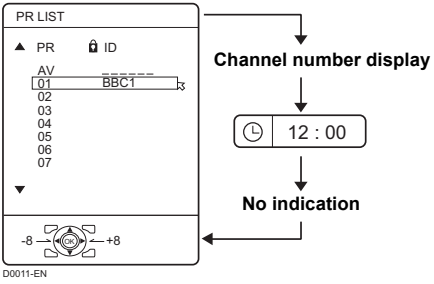
Press the ◿ −/+ buttons to adjust the volume.
The volume level indicator appears and the volume changes as you press the ◿ −/+ buttons.

■ **Muting the sound**
Press the 🔇 (muting) button to turn off the sound.
Pressing the 🔇 (muting) button again restores the previous volume level.

Information function

You can see the channel number of the programme you are watching, the current time or the PR LIST.
From the PR LIST, you can choose a channel or EXT terminal.

Press the ⓘ (Information) button to display the information you want to see.
Pressing the ⓘ (Information) button changes the display as follows:



Channel number display:
The channel number and channel name (when the channel name is registered) of the programme you are watching or the EXT terminal number is displayed.

Time display:
The current time of the teletext data is displayed.
If the TV has not received a TV channel that has teletext programmes since it was turned on, the time display is blank. To view the current time, choose a TV channel that has teletext programmes.

- An incorrect current time is sometimes displayed when watching videos.

PR LIST:
The programme number (PR) and EXT terminal list is displayed.
Pressing the **OK** button after choosing the programme number (PR) or EXT terminal with the ◀/▶/▼/▲ buttons will display the chosen programme or EXT terminal.

- For programme numbers (PR) for which the CHILD LOCK function is set, the 🔒 (CHILD LOCK) mark is displayed. For details see “CHILD LOCK” on page 29.
- For programme numbers (PR) which is registered as a favourite channel, the 🕮 (favourite) mark is displayed. For details see “Favourite channel function” on page 19.

ZOOM function

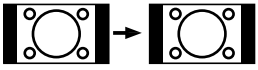
You can change the screen size according to the picture aspect ratio. Choose the optimum one from the following ZOOM modes.

- The ZOOM mode is fixed at FULL when you are using the TV as a PC screen.

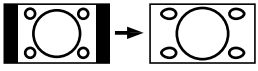
AUTO:
When a WSS (Wide Screen Signalling) signal, which shows the aspect ratio of the picture, is included in the broadcast signal or the signal from an external device, the TV automatically changes the ZOOM mode to 16:9 ZOOM mode or FULL mode according to the WSS signal.
If a WSS signal is not included, the picture is displayed according to the ZOOM mode set with the 4:3 AUTO ASPECT function.

- For details of the 4:3 AUTO ASPECT function, see "4:3 AUTO ASPECT" on page 27.
- When the AUTO (WSS) mode does not function correctly due to poor WSS signal quality or when you want to change the ZOOM mode, press the **ZOOM** button and change to another ZOOM mode.

REGULAR:
Use to view a normal picture (4:3 aspect ratio) as this is its original shape.



PANORAMIC:
This stretches the left and right sides of a normal picture (4:3 aspect ratio) to fill the screen, without making the picture appear unnatural.

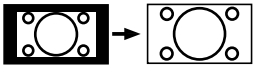


- The top and bottom of the picture are slightly cut off.

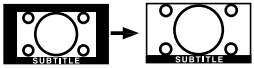
14:9 ZOOM:
This zooms up the wide picture (14:9 aspect ratio) to the upper and lower limits of the screen.



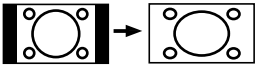
16:9 ZOOM:
This zooms up the wide picture (16:9 aspect ratio) to the full screen.



16:9 ZOOM SUBTITLE:
This zooms up the wide picture (16:9 aspect ratio) with subtitles to the full screen.



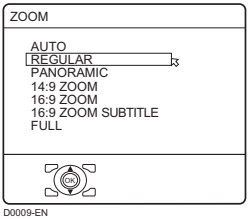
FULL:
This uniformly stretches the left and right sides of a normal picture (4:3 aspect ratio) to fill the wide TV screen.



- For 16:9 aspect ratio pictures that have been squeezed into a normal picture (4:3 aspect ratio), use the FULL mode to restore the picture to its original shape.

■ Choose the ZOOM mode

1 Press the ZOOM button to display the ZOOM menu



2 Press the ▼/▲ buttons to choose a ZOOM mode. Then press the OK button

The picture expands and the chosen ZOOM mode is displayed in about 5 seconds.

- The ZOOM mode may be automatically changed by the control signal from an external device. When you want to return to the previous ZOOM mode, choose the ZOOM mode again.

■ Adjusting the visible area of the picture

If subtitles or the top (or bottom) of the picture are cut off, you can adjust the visible area of the picture manually.

1 Press the ZOOM button

The ZOOM menu appears.

2 Press the OK button to display the ZOOM mode indicator

The indicator appears.



3 While it is displayed, press the ▼/▲ buttons to change the position of the picture

- You cannot adjust the visible area in REGULAR or FULL mode.

The visible area adjustment is saved even after the TV channel is changed.
However, it is cancelled if the following operations are performed.

- The power is turned off/on
- The ZOOM mode is changed
- ☰ (Text) button is pressed
- The TV is switched between TV mode and EXT mode

3D SOUND function

You can enjoy sounds with a wider ambience.

- This function does not work for the sound from headphones.

Press the ⊛ button to select one of 3D SOUND modes

ON:
When you listen to stereo sound, please select ON mode.
You can enjoy sound similar to the experience at the theatre.

MONO:
Select the MONO mode, when you listen to the mono sound.
You can enjoy the sound for a wider audience similar to stereo sound.

OFF:
The 3D SOUND function switches off.

- You can choose the 3D SOUND mode with the “SOUND menu” (see page 28).

Return to TV channel instantly

You can return to a TV channel instantly.

Press the TV button

The TV returns to the TV mode and a TV channel appears.

Favourite channel function

You can register your favourite TV channels (PR 1 – PR 99) in the number buttons 1 to 4. After registering, the channel can be called by pressing the 🕮 (favourite) button and a number button 1 to 4.

■ Favourite channel registration

1 In the normal screen, choose a TV channel (PR 1 – PR 99) that you want to register

For details, refer to "Choose a TV channel and watch images from external devices" on page 15.

2 Press and hold the 🕮 (favourite) button for three seconds or more

Then "SET 1-4?" appears on the screen.

3 Press one of the number buttons 1 to 4

The current channel is registered in the pressed number button.
After "PROGRAMMED!" appears on the screen, the favourite channel icon appears at the top-right of the screen.

- If the channel you are trying to register is already registered in one of the other number buttons 1 to 4, "NOT AVAILABLE" appears on the screen.
- Channels locked with the CHILD LOCK function cannot be registered.
- If AUTO PROGRAM is performed, the registered favourite channels are reset.

- When you want to delete a favourite channel, delete the set channel and set contents with FAVOURITE SETTING (see page 31) in the FEATURES menu.

■ Calling the favourite channel

1 In the normal screen, press the 🕮 (favourite) button

Then "FAVORITE1-4?" appears.

2 Press one of the number buttons 1 to 4

The called favourite channel appears on the screen.

- If a number button in which no channel is registered is pressed, "NO MEMORY" appears on the screen.

■ Setting the picture effect

When a favourite channel has been chosen with the 🕮 (favourite) button and number buttons 1 to 4, picture effect settings can be memorised for each favourite channel by setting the picture effects in the PICTURE menu (see page 25).
The following items in the PICTURE menu (see page 25) are memorised.
PICTURE MODE
BRIGHT-1
CONTRAST
BRIGHT-2
SHARP
COLOUR
HUE
COLOUR TEMP.
DIGITAL VNR
COLOUR SYSTEM
The last setting made for each item is memorised.

Operating a JVC brand VCR or DVD player

These buttons will operate a JVC brand VCR or DVD player. Pressing a button that looks the same as the device's original remote control button has the same effect as the original remote control.

1 Set the VCR/TV/DVD Switch to the VCR or DVD position

VCR:
When you are operating the VCR, set the switch to the VCR position.

- You can turn the VCR on or off with the ⏻/I (standby) button.

DVD:
When you are operating the DVD player, set the switch to the DVD position.

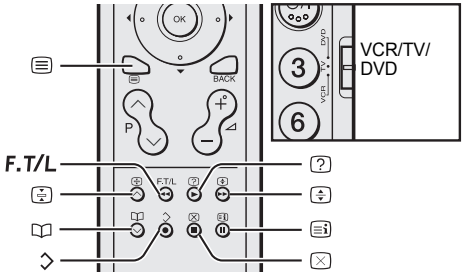
- You can turn the DVD player on or off with the ⏻/I (standby) button.
- You can also press the **MENU** or **TOP MENU** button and display the DVD disc menu screen, and then operate by pressing the ◄/►/▼/▲ buttons.

2 Press the VCR/DVD Control Button to control your VCR or DVD player

- If your device is not made by JVC, these buttons will not work.
- Even if your device is made by JVC, some of these buttons may not work, depending on the device you are using.
- You can use the ∨/∧ buttons to choose a TV channel the VCR will receive, or choose the chapter the DVD player plays back.
- Some models of DVD player use the ∨/∧ buttons for both operating the fast forward/backward functions and for choosing the chapter. In this case, the ◄◄/►► buttons do not work.

You cannot turn the TV on or off when the VCR/TV/DVD switch is set to the VCR or DVD position.
When you turn the TV on or off, set the VCR/TV/DVD switch to the TV position.

Teletext function



Basic operation

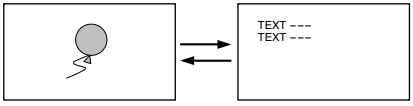
1 Choose a TV channel with a teletext broadcast

2 Set the VCR/TV/DVD switch to the TV position



3 Press ☰ (Text) button to display the teletext

Pressing ☰ (Text) button changes the mode as follows:



TV mode Text mode

4 Choose a teletext page by pressing the P ∨/∧ buttons, number buttons or colour buttons

To return to the TV mode:
Press the **TV** button or ☰ (Text) button.

- If you have trouble receiving teletext broadcasts, consult your local dealer or the teletext station.
- The ZOOM function will not work in the TV and text mode or Text mode.
- You cannot operate menus when viewing a teletext programme.
- Language display depends on the country which was set on the COUNTRY menu. If characters on a Teletext programme do not appear properly, change the COUNTRY setting to other country's. To change the COUNTRY setting, perform steps 1 and 2 of the "AUTO PROGRAM" procedure on page 32 and then press the **OK** button.

Using the List Mode

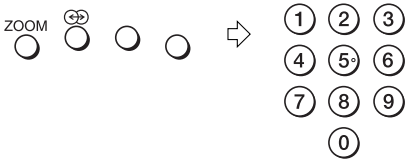
You can store the numbers of your favourite teletext pages in memory and call them up quickly using the colour buttons.

■ To store the page numbers:

1 Press *F.T/L* button to go into the List mode

The page numbers you have stored are displayed at the bottom of the screen.

2 Press a colour button to choose a position. Then press the number buttons to enter the page number



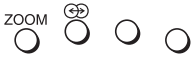
3 Press and hold down the ◇ (Store) button

The four page numbers blink white to show that they are stored in memory.

■ To call up a stored page:

1 Press the *F.T/L* button to enter the List mode

2 Press a colour button having a stored page

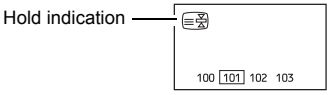


To exit the List mode:
Press the ***F.T/L*** button again.

Hold

You can hold a teletext page on the screen for as long as you want, even while several other teletext pages are being received.

Press the ⏬ (Hold) button



To cancel the Hold function:
Press ⏬ (Hold) button again.

Sub-page

Some teletext pages include sub-pages that are automatically displayed.
You can hold any sub-page, or view it at any time.

1 Press the 🕮 (Favourite) button to operate the Sub-page function

2 Press the Number buttons to enter a sub-page number

Example:

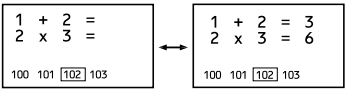
- 3rd sub-page → press ***0***, ***0***, ***0*** and ***3***.

To cancel the Sub-page function:
Press the 🕮 (Favourite) button again.

Reveal

Some teletext pages include hidden text (such as answers to a quiz).
You can display the hidden text.

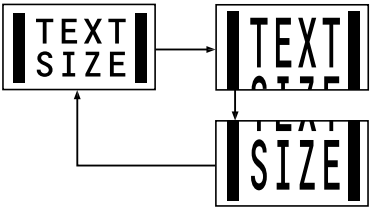
Each time you press the ? (Reveal) button, text is hidden or revealed



Size

You can double the height of the teletext display.

Press the ⏭ (Size) button



Index

You can return to the index page instantly.

Press the (Index) button
Returns to page 100 or a previously specified page.

Cancel

You can search for a teletext page while watching TV.

1 Press the number button to enter a page number, or press a colour button
The TV searches for a teletext page.

2 Press ⊠ (Cancel) button
The TV programme appears. When the TV finds the teletext page, its page number appears in the upper left of the screen.

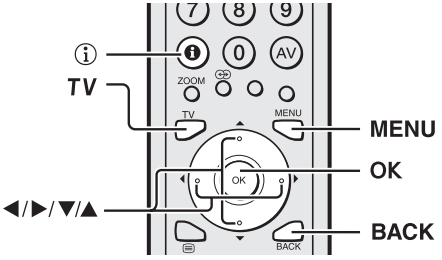
3 Press ⊠ (Cancel) button to return to a teletext page when the page number is on the screen

- The TV mode cannot be resumed by pressing the ⊠ (Cancel) button. To return to the TV mode press ***TV***.

Using the TV's menu

This TV has a number of functions you can operate using menus. To use all your TV's functions, you need to understand the basic menu operating techniques fully.

Buttons used to operate the menus



Basic operation

1 Press the MENU button to display the menu bar



D0105-EN

2 Press the ◄/► buttons to choose the menu you want to use and then press the OK button



D1105-EN

Chosen menu

Chosen menu name

3 Press the ▼/▲ buttons to choose the item to be set, press the ◄/► buttons to set the item, and then press the OK button

If there are sub-menus, use the ◄/►/▼/▲ buttons to operate them.

- Press the **BACK** button to return to the previous menu.
- Press the **TV** or **MENU** button to exit from the menu.
- Some menu items may not be operated or set depending on the TV status or other menu item settings.
  Menu items that cannot be operated or set are displayed in grey in the menu and cannot be chosen.

Types of menu



D0106

PICTURE menu
Choose to set the screen settings.



D0107

SOUND menu
Choose to set the sound settings.



D0108

FEATURES menu
Choose to set the sleep timer and child lock settings.



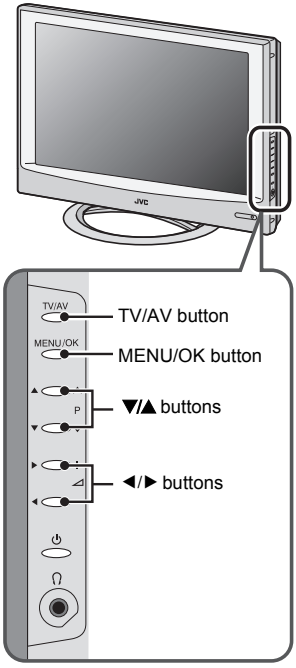
D0109

SET UP menu
Choose to edit the channels or set the display language settings.

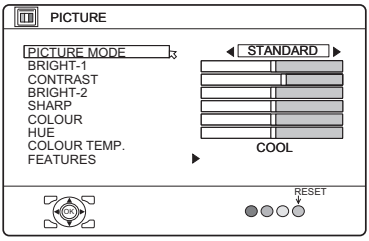
- The menu will disappear after about one minute if no operation is performed.

Operation with the buttons on the TV

You can also operate the menus using the buttons on the front panel of the TV.



PICTURE menu



- While the PICTURE menu is displayed, pressing the blue button will set the BRIGHT-1, CONTRAST, BRIGHT-2, SHARP, COLOUR, HUE settings to their default settings.
- When watching the picture from EXT-1 to EXT-4 or the PC, picture effect settings can be memorised for each external input by setting the picture effects in the PICTURE menu.
  The following items in the PICTURE menu are memorised.
  PICTURE MODE
  BRIGHT-1
  CONTRAST
  BRIGHT-2
  SHARP
  COLOUR
  HUE
  COLOUR TEMP.
  DIGITAL VNR
  COLOUR SYSTEM
  The last setting made for each item is memorised.

PICTURE MODE

You can choose one of three PICTURE MODEs to adjust the picture settings automatically.

BRIGHT:
Heightens contrast and sharpness.

STANDARD:
Standardizes picture adjustment.

SOFT:
Softens contrast and sharpness.

BRIGHT-1

You can adjust the back light.
◀ : darker
▶ : brighter

CONTRAST

You can adjust the picture contrast.
◀ : lower
▶ : higher

BRIGHT-2

You can adjust the picture brightness.
◀ : darker
▶ : brighter

SHARP

You can adjust the picture sharpness.
◀ : softer
▶ : sharper

COLOUR

You can adjust the picture colour.
◀ : lighter
▶ : deeper

HUE

You can adjust the picture tint.
◀ : reddish
▶ : greenish

- You can change the HUE setting (picture hue) when the colour system is NTSC 3.58, or NTSC 4.43.

COLOUR TEMP.

You can select one of three COLOUR TEMP. modes (three tones of white) to adjust the white balance of the picture. Since white is the colour which is used as a reference for all the other colours, changing the COLOUR TEMP. mode affects the appearance of all the other colours on the screen.

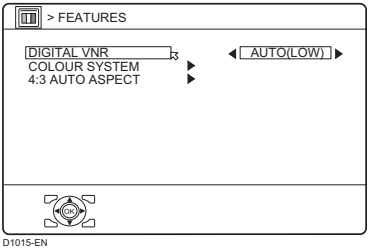
COOL:
A bluish white. Using this mode when watching bright pictures allows you to enjoy a more vivid and bright picture.

NORMAL:
The normal white colour.

WARM:
A reddish white. Using this mode when watching films allows you to enjoy colours that are characteristic of films.

FEATURES

Choose FEATURES and press the **OK** or ▶ button to display the sub-menu.



D1015-EN

■ DIGITAL VNR

The DIGITAL VNR function cuts down the amount of 'noise' ('snow' or interference) in the original picture.

ON:
This function is turned on.

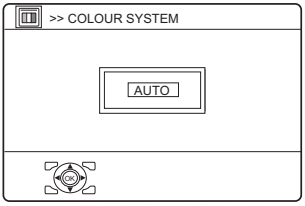
OFF:
This function is turned off.

■ COLOUR SYSTEM

The colour system is chosen automatically. However, if the picture is not clear or no colour appears, choose the colour system manually.

1 Choose COLOUR SYSTEM. Then press the OK or ▶ button

The sub-menu of the COLOUR SYSTEM function appears.



D0016-EN

2 Press the ▼/▲ buttons to choose the appropriate colour system. Then press the OK button

PAL:
PAL system

SECAM:
SECAM system

NTSC 3.58:
NTSC 3.58 MHz system

NTSC 4.43:
NTSC 4.43 MHz system

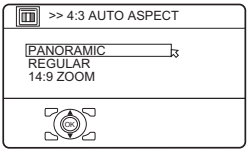
AUTO:
This function detects a colour system from the input signal. You can only use this when you are viewing a picture from programme number PR 0 (AV), or an EXT terminal.

- The AUTO function may not function properly if you have poor signal quality. If the picture is abnormal in the AUTO function, choose another colour system manually.
- When in the Programme numbers PR 0 (AV) to PR 99, you cannot choose NTSC 3.58 or NTSC 4.43.
- COLOUR SYSTEM cannot be chosen when you are watching the PC picture.

■ 4:3 AUTO ASPECT

You can choose one of three ZOOM modes, REGULAR, PANORAMIC or 14:9 ZOOM, as the ZOOM mode for the normal picture (4:3 aspect ratio).

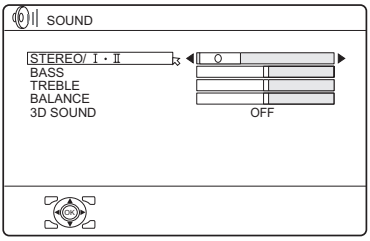
1 Choose 4:3 AUTO ASPECT then press the OK button



D0017-EN

2 Press the ▼/▲ buttons to choose a ZOOM mode

SOUND menu



D0019-EN

- When the headphones are connected, only "STEREO / I • II" can be used.

STEREO / I • II

When you are viewing a bilingual broadcast programme, you can choose the sound from Bilingual I (Sub I) or Bilingual II (Sub II). If you have poor reception on a stereo broadcast, you can change from stereo to mono sound so that you can hear the broadcast more clearly and easily.

: Stereo sound

: mono sound

I : Bilingual I (sub I)

II : Bilingual II (sub II)

- The sound mode you can choose differs depending on the TV programme.
- This function does not work in the EXT modes.

BASS

You can adjust the low tone of the sound.
◀ : weaker
▶ : strong

TREBLE

You can adjust the high tone of the sound.
◀ : weaker
▶ : strong

BALANCE

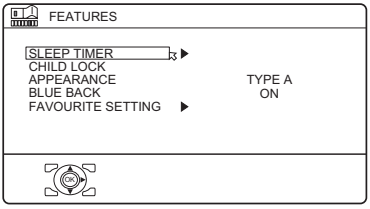
You can adjust the volume balance between the left and right speaker.
◀ : turn the left speaker's volume level up.
▶ : turn the right speaker's volume level up.

3D SOUND

You can enjoy Surround sound with a "live" effect by using the 3D SOUND function.

- You can choose a 3D SOUND mode from ON, MONO and OFF modes. For details, see "3D SOUND function" on page 18.
- You can also operate the 3D SOUND function with the button. For details, see "3D SOUND function" on page 18.

FEATURES menu



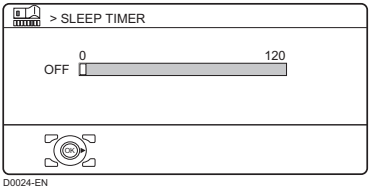
D0023-EN

SLEEP TIMER

You can set the TV to automatically turn off after a set period of time.

1 Choose SLEEP TIMER. Then press the OK or ▶ button

A Sub-menu of the SLEEP TIMER function appears.



D0024-EN

2 Press the ◀/▶ buttons to set the period of time. Then press the OK button

You can set the period of time for up to 120 minutes (2 hours) in 10 minute steps.

- One minute before the SLEEP TIMER function turns off the TV, "GOODNIGHT!" appears.
- The SLEEP TIMER function cannot be used to turn off the TV's main power.
- When the SLEEP TIMER function is on, you can display the sub-menu of the SLEEP TIMER function again to confirm or change the remaining period of time of the SLEEP TIMER function. Press the **OK** button to leave the menu after confirming or changing the remaining time.

To cancel the SLEEP TIMER function:

Press the ◀ button to set the period of time to "OFF".

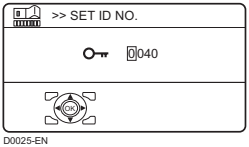
CHILD LOCK

When there is a TV channel you do not want your children to watch, you can use the CHILD LOCK function to lock out the TV channel. Even when a child chooses a programme number (PR) for a locked TV channel the screen will change to blue and display 🔒 (CHILD LOCK) so the TV channel cannot be viewed. Unless you enter a pre-set ID number by a special operation, the lock cannot be released and the child cannot view the TV channel.

■ To set the CHILD LOCK function

1 Choose CHILD LOCK, then press the 0 button

"SET ID NO." (ID number setting screen) appears.



D0025-EN

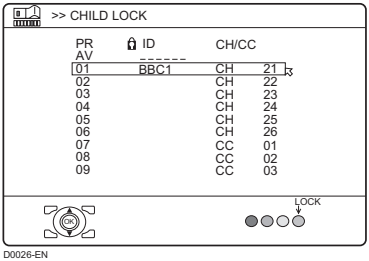
2 Set the ID number to your liking

1 Press the ▼/▲ buttons to choose a number.

2 Press the ◀/▶ buttons to move the cursor.

3 Press the OK button

The Sub-menu of CHILD LOCK appears.



D0026-EN

4 Press the ▼/▲ buttons to choose a TV channel

Every time you press the ▼/▲ buttons, the Programme number (PR) changes, and the picture of the TV channel registered in the Programme number (PR) is displayed on the screen.

5 Press the blue button and set the CHILD LOCK function. Then press the OK button

🔒 (CHILD LOCK) appears and the TV channel is locked.

To reset the CHILD LOCK function:
Press the blue button again.
🔒 (CHILD LOCK) disappears.

To disable easy resetting of the CHILD LOCK function, the menu disappears if you choose the CHILD LOCK function and press the **OK** button.

■ To view a locked TV channel

1 Choose a programme number (PR) of a locked TV channel with the number buttons or PR LIST

The screen changes to blue and the 🔒 (CHILD LOCK) appears. You cannot view the TV channel.



D0027-EN

2 Press the ⓘ (Information) button to display "ID NO." (ID No. input screen)



D0028-EN

3 Press the number buttons to enter the ID number

The lock is temporarily released so you can view the TV channel.

If you have forgotten the ID number:
Perform step 1 of "To set the CHILD LOCK function". After confirming the ID number, press the **TV** button to exit the menu.

- Even if you reset the lock temporarily, it does not mean that the CHILD LOCK function set for the TV channel is cancelled. The next time anyone tries to view the TV channel, it will be locked again.
- When you want to cancel the CHILD LOCK function, you must perform the operation "To set the CHILD LOCK function" again.
- To stop it being easy to choose the programme number (PR) of a locked TV channel, the programme number (PR) has been set so that it cannot be chosen with the ▼/▲ buttons or the buttons of the TV.
- To stop it being easy to reset the lock, "ID NO." (ID No. input screen) is set so that it cannot appear unless you press the ⓘ (Information) button.

APPEARANCE

Press the ◄/► button and choose the format in which the channel number is displayed from two types: TYPE A and TYPE B.

BLUE BACK

You can set the TV to automatically change to a blue screen and mute the sound if the signal is weak or absent, or when there is no input from an external device.

ON:
This function is turned on.

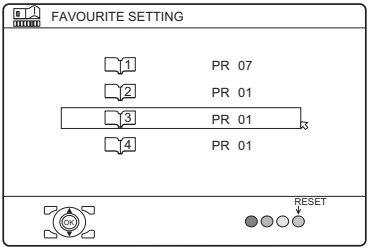
OFF:
This function is turned off.

FAVOURITE SETTING

Chose when deleting the favourite channels registered in the buttons 1 to 4.

1 Choose FAVOURITE SETTING, then press the OK or ▶ button

The FAVOURITE SETTING menu appears.



D0112-EN

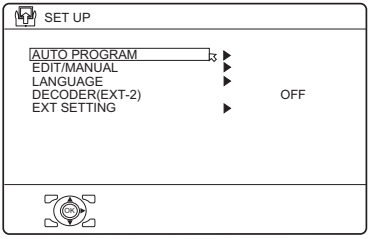
2 Press the ▼/▲ buttons and chose the favourite channel that you want to delete

3 Press the blue button

The chosen favourite channel and set contents are deleted.

- For details of the favourite channels, see “Favourite channel function” on page 19.

SET UP menu



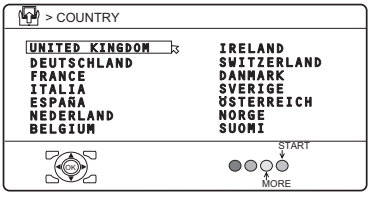
D0029-EN

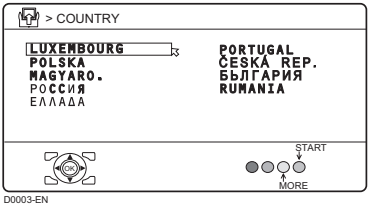
AUTO PROGRAM

You can again perform the AUTO PROGRAM function TV channel automatic registration which was performed in the "Initial settings" (page 7).

1 Choose AUTO PROGRAM, then press the OK or ▶ button

The COUNTRY menu appears as a sub-menu of the AUTO PROGRAM function. There are two COUNTRY menus. Pressing the yellow button changes the COUNTRY menu as follows:





D0003-EN

2 Press the ◀/▶ and ▼/▲ buttons to choose the country where you are

3 Perform steps 5 and 6 of the "Initial settings" (page 8)

EDIT/MANUAL

The EDIT/MANUAL functions are divided into two types:

- editing the current programme numbers (PR) (EDIT functions); and
- manually storing a TV channel you want to view on a particular programme number (PR) (MANUAL function).

Here are the details about these functions:

MOVE:
This function changes the programme number (PR) of a TV channel.

ID:
This function registers a channel name (ID) to a TV channel.

INSERT:
This function adds a new TV channel in the current programme numbers (PR) list by using the CH/CC number.

- You cannot use the INSERT function if you do not know the channel number of a TV channel. Use the MANUAL function to register a TV channel in the programme number (PR).

DELETE:
This function deletes a TV channel you do not want to list.

MANUAL:
This function manually stores a new TV channel in a programme number (PR).

Caution

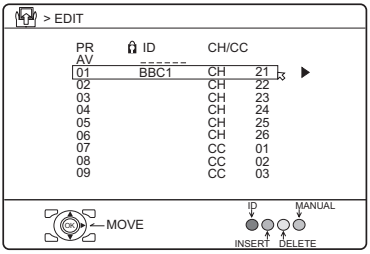
- Using the MOVE, DELETE or INSERT functions rewrites the current programme numbers (PR) list. Therefore, the programme numbers (PR) of some of the TV channels will change.
- Using the MANUAL function for a TV channel for which the CHILD LOCK function has been set cancels the CHILD LOCK function for that channel.

- Using the MANUAL function for a TV channel for which the DECODER (EXT-2) function has been set to ON returns the setting of the DECODER (EXT-2) function for that channel to OFF.
- When a TV channel has already been registered in PR 99, using the INSERT function deletes that TV channel.

■ Basic operation

1 Choose EDIT/MANUAL, then press the OK or ▶ button

The EDIT menu appears.

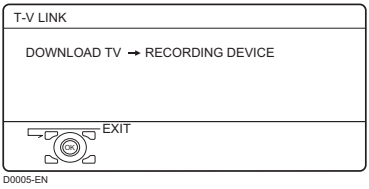


D0038-EN

2 Follow the description for the function you want to use

3 Press the OK button to complete the settings

The T-V LINK menu appears.



D0005-EN

If you do not have a T-V LINK compatible VCR connected:
Press the **TV** button to exit the T-V LINK menu.
The T-V LINK menu disappears.

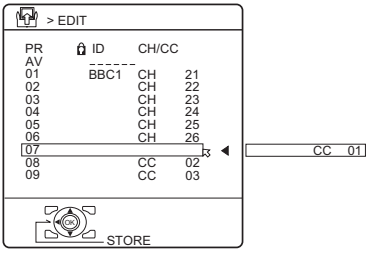
If you have a T-V LINK compatible VCR connected to the EXT-2 terminal:
Follow "Downloading the data to VCR" on page 10 to transmit the programme number (PR) data.

- For programme number PR 0, "AV" appears in the programme numbers (PR) list.
- An EXT terminal number does not appear in the programme numbers (PR) list.

■ MOVE

1 Press the ▼/▲ buttons to choose a TV channel

2 Press the ▶ button to start the MOVE function



D0030-EN

3 Press the ▼/▲ buttons to choose a new programme number (PR)

To cancel the MOVE function:
Press the **BACK** button.

4 Press the ◀ button to change the programme number (PR) of a TV channel to a new programme number (PR)

■ DELETE

1 Press the ▼/▲ buttons to choose a TV channel

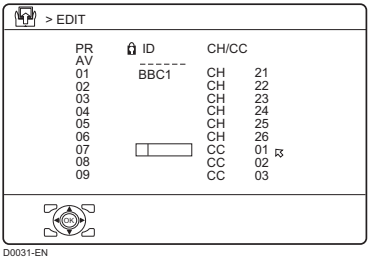
2 Press the yellow button to delete the TV channel

The TV channel is deleted from the programme numbers (PR) list.

■ ID

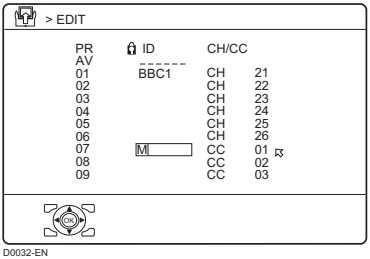
1 Press the ▼/▲ buttons to choose a TV channel

2 Press the red button to start the ID function



D0031-EN

3 Press the ▼/▲ buttons to choose a character



D0032-EN

4 Press the ◄/► buttons to move the cursor

5 Repeat steps 3 and 4 to complete the channel name

6 Press the OK button to give a channel name (ID) to a TV channel

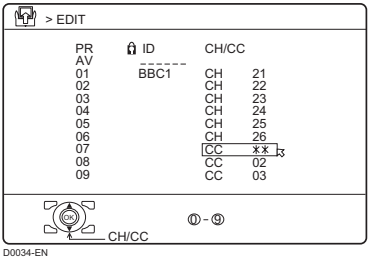
Before performing INSERT or MANUAL operation

- If you register the TV channel (SECAM-L system) from a French station, be sure to set the COUNTRY setting to FRANCE. If the COUNTRY setting is not set to FRANCE, perform steps 1 and 2 of the "AUTO PROGRAM" (page 32) procedure and set the COUNTRY setting to FRANCE before pressing the **OK** button.
- A CH/CC number unique to this TV and corresponding to the Channel number of a TV channel is required. Find the corresponding CH/CC number from a table "CH/CC numbers" on page 44 based on the Channel number of the TV channel.
- When the COUNTRY setting is not FRANCE, use a two-digit CH/CC number. When the COUNTRY setting is FRANCE, use a three-digit CH/CC number.

■ INSERT

1 Press the ▼/▲ buttons to choose a programme number (PR) for which you will register a new TV channel

2 Press the green button and start the INSERT function



D0034-EN

To cancel the INSERT function:
Press the **BACK** button.

3 Press the ▼/▲ buttons to choose "CH" or "CC", then enter the remaining CH or CC number

When the COUNTRY setting is FRANCE:
Choose "CH1", "CH2", "CC1" or "CC2".

The TV shifts to registration mode. When the registration is completed, the picture of the TV channel appears on the screen.

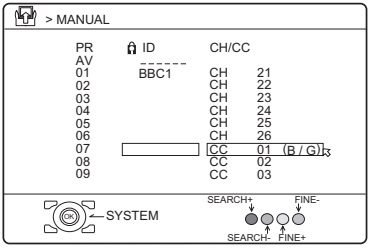
- The CH/CC number is a number given to each broadcast frequency that carries a TV channel. If the TV cannot detect the TV channel corresponding to the broadcast frequency indicated by the CH/CC number, a "no-signal" picture appears.

■ MANUAL

1 Press the ▼/▲ buttons to choose a programme number (PR) for a new TV channel

2 Press the blue button to activate the MANUAL function

At the right side following the CH/CC number, the SYSTEM (broadcasting system) of the TV channel appears.



D0035-EN

To cancel the MANUAL function:
Press the **BACK** button.

3 Press the ▶ button to choose the SYSTEM (broadcasting system) for a TV channel you want to register

TV channel (SECAM-L system) from a French station:
Set the SYSTEM to "L". If it is set to one other than "L", you cannot receive the TV channel of the SECAM-L system.

Other TV channels:
If you do not know the correct broadcasting system, set the SYSTEM to "B/G". If "B/G" is not correct, you will not hear the sound normally when the TV detects a TV channel. In this case, retry to set the SYSTEM correctly so that no problem arises.

4 Press the green or red button to search for a TV channel

Scanning stops when the TV finds a TV channel. Then the TV channel is displayed.

5 Press the green or red button repeatedly until the TV channel you want appears

If the TV channel reception is poor:
Press the blue or yellow button to fine-tune the TV channel.

6 Press the OK button and register the TV channel to a Programme number (PR)

The normal EDIT menu is resumed.

LANGUAGE

The LANGUAGE setting which was performed in the "Initial settings" (page 7) can be changed.

1 Choose LANGUAGE, then press the OK or ▶ button

A sub-menu of the LANGUAGE function appears.



D0002-EN

2 Press the ◀/▶ and ▼/▲ buttons to choose a language. Then press the OK button

DECODER (EXT-2)

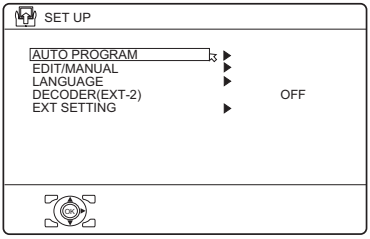
If you have a decoder connected to a T-V LINK compatible VCR, which in turn is connected to the EXT-2 terminal, use the DECODER (EXT-2) function to unscramble the scrambled TV channels.

1 Turn on the decoder power

2 Display the scrambled TV channel on the TV

Even if the decoder is working, a scrambled picture appears.

3 Display the SET UP menu and choose DECODER (EXT-2)



D0029-EN

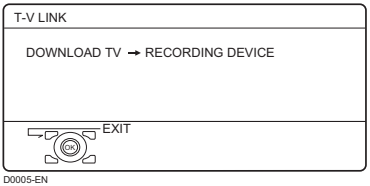
4 Press the ◀/▶ buttons to choose ON

An unscrambled picture appears.

To cancel the DECODER (EXT-2) function:
Press the ◀/▶ buttons to choose OFF.

5 Press the OK button to complete the setting

The T-V LINK menu appears.



D0005-EN

You can send the programme numbers data to a VCR with the T-V LINK function.

6 Turn on the VCR, and then press the OK button to transmit the data to VCR

The T-V LINK menu disappears once the data transmission ends.

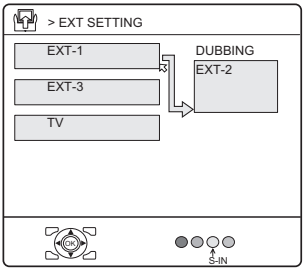
If the DECODER (EXT-2) function has been set to “ON” but the TV channel cannot be unscrambled, check the following:

- Has the decoder been connected to the VCR properly according to the VCR and decoder instruction manuals?
- Has the decoder power been turned on?
- Can the TV channel be unscrambled with a decoder?
- Do you need to change the VCR settings in order to connect the decoder? Confirm that the VCR is set properly by rechecking the VCR instruction manual.

EXT SETTING

1 Choose EXT SETTING, then press the OK or ▶ button

The EXT SETTING menu appears.



2 Follow the instructions for the function you want to use and operate the function

S-IN:

You can enjoy the high-quality picture of the S-VIDEO signal (Y/C signal).

ID LIST:

You can have a name for each of the devices connected for each EXT terminal.

DUBBING:

You can choose a signal source to be output from an EXT-2 terminal.

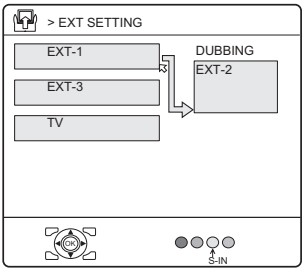
■ S-IN (S-VIDEO input)

You can connect a device (such as an S-VHS VCR) to enjoy the high-quality picture of the S-VIDEO signal (Y/C signal).

Preparation:

- First read the device’s instruction manual and “Additional preparation” on page 41 to connect the device to the TV properly. Second, follow the device’s instruction manual to set the device so that it sends an S-VIDEO signal (Y/C signal) to the TV.
- Do not set S-IN (S-VIDEO input) to an EXT terminal connected to a device which cannot output an S-VIDEO (Y/C signal).

1 Press the ◀/▶ or ▼/▲ buttons to choose an EXT terminal



D0020-EN

2 Press the yellow button and set the S-IN (S-VIDEO input). Then press the OK button

An S-IN (S-VIDEO input) mark is displayed. You can view an S-VIDEO signal (Y/C signal) instead of the regular video signal (composite signal).

To cancel the S-IN (S-VIDEO input) setting:

Press the yellow button and turn off S-IN (S-VIDEO input) mark. The regular video signal (composite signal) pictures are resumed.

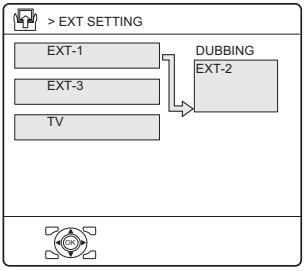
- Setting S-IN (S-VIDEO input) changes the head character from “E” to “S”. When an EXT terminal receives a normal video signal, “E1”, “E2” or “E3” appears on the display. This changes to “S1”, “S2” or “S3” when it receives an S-VIDEO signal.
- Even a device which can output an S-VIDEO signal (Y/C signal) may output a regular video signal (composite signal) depending on the device setting. If a picture cannot appear because the S-IN (S-VIDEO input) setting has been made, read the device instruction manual carefully again to check for the device settings.

■ DUBBING

You can choose a signal source to be output from the EXT-2 terminal.

You can do this with the output signals of the devices connected to other EXT terminals, or with the picture and sound from a TV channel you are currently viewing.

1 Press the ◀/▶ buttons to choose the arrow from the menu



D0022-EN

2 Press the ▼/▲ buttons to choose an EXT terminal or TV. Then press the OK button

The arrow in the menu represents a signal flow. The left side of the arrow shows a signal source output from the EXT-2 terminal.

EXT-1/EXT-3:

The output signal of the device connected to an EXT terminal passes through the TV and is output from the EXT-2 terminal.

TV:

The picture and sound of the TV channel you are currently viewing are output from the EXT-2 terminal.

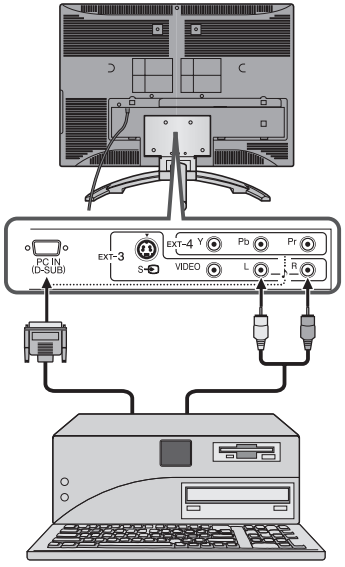
- During dubbing, you cannot turn off the TV. Turning off the TV also turns off the output from the EXT-2 terminal.
- When you choose an EXT terminal as an output, you can view a TV programme or a picture from the other EXT terminal while dubbing the picture from a device connected to the EXT terminal onto a VCR connected to the EXT-2 terminal.
- The RGB signals from TV games cannot be output. Teletext programmes cannot be output.

Displaying a computer screen

This TV can be used as a computer screen.

Connecting to the computer

Use a D-SUB cable to connect the TV's PC IN terminal to the computer's analogue RGB output terminal.
If you want to listen to the sound from the computer, use an audio cable to connect the EXT-3 L/R terminal to the computer's sound output terminal.
When the sound from the computer is mono, connect to the EXT-3 L terminal.



- Refer to the computer manual for a detailed explanation of the connections at the computer side.
- Ensure that the connectors are facing the correct way when connecting.
- After connecting the D-SUB cable, tighten the two screws to fix the connector in place.

Watching images from a computer

After starting the computer, press the AV or P ∨/∧ buttons to choose "PC"

"PC" is after EXT-4.
You can listen to the sound when the sound from the computer is connected to the EXT-3 L/R terminal.

- When the sound from the computer is connected to EXT-3, by choosing external input EXT-3 the sound from the computer can be listened to, but the images from the computer cannot be seen.

Table of signals for each type of computer

Resolution	Vertical frequency (Hz)	Horizontal frequency (kHz)
640 × 480 (VGA)	60.0	31.5
1024 × 768 (XGA)	60.0	42.0

* Only the above formats are supported.
* Even with the above formats and at 60 Hz, some problems may be experienced depending on the quality of the synchronous signal. (Depending on the quality, some pictures may not be displayed properly.)
* Apple Macintosh* computers are not supported.

When a picture is not displayed

Check the computer's refresh rate and set it to 60 Hz. Refer to the computer's instruction manual.
Computers which cannot have their refresh rate set to 60 Hz cannot be used with this unit.

* Apple Macintosh is a registered trademark of Apple Computer, Inc.

Additional preparation

Connecting external equipment

Connect the equipment to the TV, making the correct rear panel and front panel connections.

Before connecting anything:

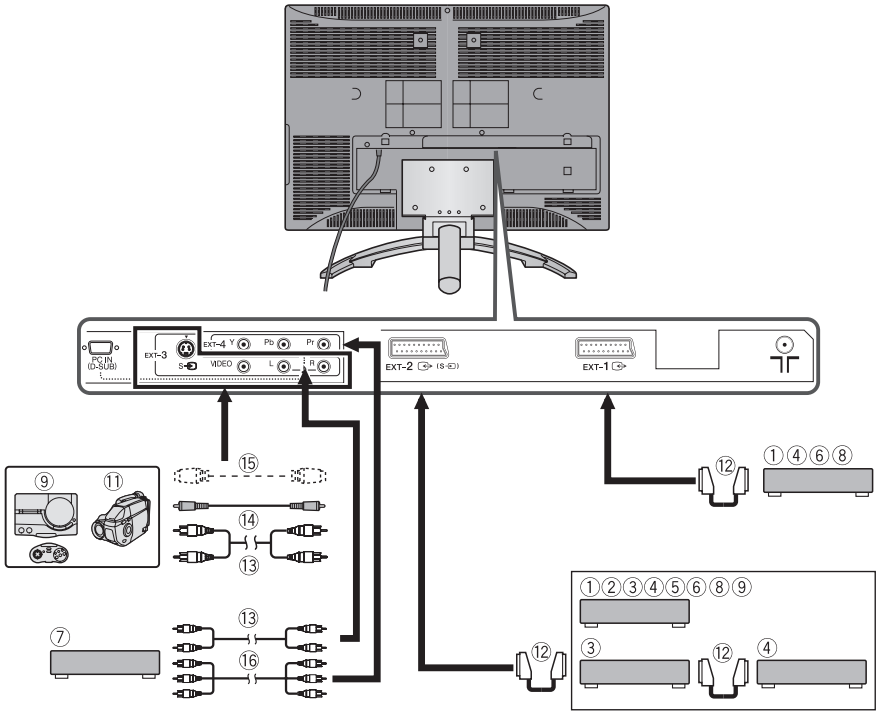
- Read the manuals that came with the equipment.
  Depending on the equipment, the connection method may be different from the diagram. Also, the equipment settings may need to change depending on the connection method.
- Turn off all the equipment including the TV.
- The “Specifications” on page 49 give the details of the EXT terminals. If you are connecting equipment not listed in the following connection diagram, see the table to choose the best EXT terminal.
- Connecting cables are not supplied.

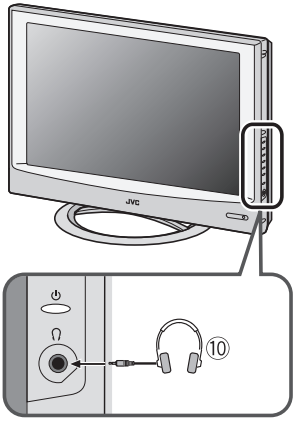
■ Connecting the PC

For details, see “Connecting to the computer” on page 40.

① VCR (composite signal)
② VCR (composite signal/S-VIDEO signal)
③ T-V LINK compatible VCR (composite signal/S-VIDEO signal)
④ Decoder
⑤ DVD player (composite signal/S-VIDEO signal)
⑥ DVD player (composite signal/RGB signal)
⑦ DVD player (component video signals; Y/Pb/Pr)
⑧ TV game (composite signal/RGB signal)
⑨ TV game (composite signal/S-VIDEO signal)
⑩ Headphones
⑪ Camcorder (composite signal/S-VIDEO signal)
⑫ SCART cable
⑬ Audio cable
⑭ Video cable
⑮ S-VIDEO cable
⑯ Component cable

without terminal covers





■ Equipment which can output the S-VIDEO signal (Y/C signal) such as an S-VHS VCR

Connect the equipment to an EXT terminal other than EXT-1/EXT-4.
You can choose between an S-VIDEO signal (Y/C signal) and a regular video signal (composite signal). For details of how to operate the equipment, see “S-IN (S-VIDEO input)” on page 37.

■ T-V LINK compatible VCR

Be sure to connect the T-V LINK compatible VCR to the EXT-2 terminal. If not, the T-V LINK function will not work properly.

- When connecting a T-V LINK compatible VCR to the EXT-2 terminal, be sure to connect the decoder to the VCR. If not, the T-V LINK function may not work properly.
- When you connect the decoder to the VCR, after you have stored TV channels in the programme numbers (PR) list, set the DECODER (EXT-2) function for the programme number (PR) to ON to unscramble a scrambled TV channel. For details, see “DECODER (EXT-2)” on page 36.

■ Connecting headphones

Connect the headphones with a stereo mini-jack (3.5 mm diameter) to the headphone socket at the TV rear panel.

- No sound comes from the TV speakers when the headphones are connected.

■ Video or sound signal output from the EXT-2 terminal

You can change over the output of the video/sound signal from the EXT-2 terminal. This is useful when you want to dub the video/sound from another device onto the VCR connected to the EXT-2 terminal. For details on how to do this, see “DUBBING” on page 38.

- The signals from EXT-4 and PC IN terminal cannot be output from EXT-2.

■ TV output from the EXT-1 terminal

The video/sound signal of a TV channel you are viewing is always output from the EXT-1 terminal.

- Changing over a programme number (PR) also changes over the TV output from the EXT-1 terminal.
- The video/sound signal from an EXT terminal cannot be output.
- Teletext programmes cannot be output.

CH/CC numbers

When you want to use the INSERT function on page 35, find the CH/CC number corresponding to the Channel number of the TV channel from this table.

CH	Channel
CH 02 / CH 202	E2, R1
CH 03 / CH 203	E3, ITALY A
CH 04 / CH 204	E4, ITALY B, R2
CH 05 / CH 205	E5, ITALY D, R6
CH 06 / CH 206	E6, ITALY E, R7
CH 07 / CH 207	E7, ITALY F, R8
CH 08 / CH 208	E8, R9
CH 09 / CH 209	E9, ITALY G
CH 10 / CH 210	E10, ITALY H, R10
CH 11 / CH 211	E11, ITALY H+1, R11
CH 12 / CH 212	E12, ITALY H+2, R12
CH 21 / CH 221	E21, R21
CH 22 / CH 222	E22, R22
CH 23 / CH 223	E23, R23
CH 24 / CH 224	E24, R24
CH 25 / CH 225	E25, R25
CH 26 / CH 226	E26, R26
CH 27 / CH 227	E27, R27
CH 28 / CH 228	E28, R28
CH 29 / CH 229	E29, R29
CH 30 / CH 230	E30, R30
CH 31 / CH 231	E31, R31
CH 32 / CH 232	E32, R32
CH 33 / CH 233	E33, R33
CH 34 / CH 234	E34, R34
CH 35 / CH 235	E35, R35
CH 36 / CH 236	E36, R36
CH 37 / CH 237	E37, R37
CH 38 / CH 238	E38, R38
CH 39 / CH 239	E39, R39

CH	Channel
CH 40 / CH 240	E40, R40
CH 41 / CH 241	E41, R41
CH 42 / CH 242	E42, R42
CH 43 / CH 243	E43, R43
CH 44 / CH 244	E44, R44
CH 45 / CH 245	E45, R45
CH 46 / CH 246	E46, R46
CH 47 / CH 247	E47, R47
CH 48 / CH 248	E48, R48
CH 49 / CH 249	E49, R49
CH 50 / CH 250	E50, R50
CH 51 / CH 251	E51, R51
CH 52 / CH 252	E52, R52
CH 53 / CH 253	E53, R53
CH 54 / CH 254	E54, R54
CH 55 / CH 255	E55, R55
CH 56 / CH 256	E56, R56
CH 57 / CH 257	E57, R57
CH 58 / CH 258	E58, R58
CH 59 / CH 259	E59, R59
CH 60 / CH 260	E60, R60
CH 61 / CH 261	E61, R61
CH 62 / CH 262	E62, R62
CH 63 / CH 263	E63, R63
CH 64 / CH 264	E64, R64
CH 65 / CH 265	E65, R65
CH 66 / CH 266	E66, R66
CH 67 / CH 267	E67, R67
CH 68 / CH 268	E68, R68
CH 69 / CH 269	E69, R69

CC	Channel
CC 01 / CC 201	S1
CC 02 / CC 202	S2
CC 03 / CC 203	S3
CC 04 / CC 204	S4
CC 05 / CC 205	S5
CC 06 / CC 206	S6
CC 07 / CC 207	S7
CC 08 / CC 208	S8
CC 09 / CC 209	S9
CC 10 / CC 210	S10
CC 11 / CC 211	S11
CC 12 / CC 212	S12
CC 13 / CC 213	S13
CC 14 / CC 214	S14
CC 15 / CC 215	S15
CC 16 / CC 216	S16
CC 17 / CC 217	S17
CC 18 / CC 218	S18
CC 19 / CC 219	S19
CC 20 / CC 220	S20
CC 21 / CC 221	S21
CC 22 / CC 222	S22
CC 23 / CC 223	S23
CC 24 / CC 224	S24
CC 25 / CC 225	S25
CC 26 / CC 226	S26
CC 27 / CC 227	S27
CC 28 / CC 228	S28
CC 29 / CC 229	S29
CC 30 / CC 230	S30

CC	Channel
CC 31 / CC 231	S31
CC 32 / CC 232	S32
CC 33 / CC 233	S33
CC 34 / CC 234	S34
CC 35 / CC 235	S35
CC 36 / CC 236	S36
CC 37 / CC 237	S37
CC 38 / CC 238	S38
CC 39 / CC 239	S39
CC 40 / CC 240	S40
CC 41 / CC 241	S41
CC 75 / CC 275	X
CC 76 / CC 276	Y, R3
CC 77 / CC 277	Z, ITALY C, R4
CC 78 / CC 278	Z+1, R5
CC 79 / CC 279	Z+2

CH	Channel
CH 102	F2
CH 103	F3
CH 104	F4
CH 105	F5
CH 106	F6
CH 107	F7
CH 108	F8
CH 109	F9
CH 110	F10
CH 121	F21
CH 122	F22
CH 123	F23
CH 124	F24
CH 125	F25
CH 126	F26
CH 127	F27
CH 128	F28
CH 129	F29
CH 130	F30
CH 131	F31
CH 132	F32
CH 133	F33
CH 134	F34
CH 135	F35
CH 136	F36
CH 137	F37
CH 138	F38
CH 139	F39
CH 140	F40

CH	Channel
CH 141	F41
CH 142	F42
CH 143	F43
CH 144	F44
CH 145	F45
CH 146	F46
CH 147	F47
CH 148	F48
CH 149	F49
CH 150	F50
CH 151	F51
CH 152	F52
CH 153	F53
CH 154	F54
CH 155	F55
CH 156	F56
CH 157	F57
CH 158	F58
CH 159	F59
CH 160	F60
CH 161	F61
CH 162	F62
CH 163	F63
CH 164	F64
CH 165	F65
CH 166	F66
CH 167	F67
CH 168	F68
CH 169	F69

CC	Frequency (MHz)
CC 110	116 - 124
CC 111	124 - 132
CC 112	132 - 140
CC 113	140 - 148
CC 114	148 - 156
CC 115	156 - 164
CC 116	164 - 172
CC 123	220 - 228
CC 124	228 - 236
CC 125	236 - 244
CC 126	244 - 252
CC 127	252 - 260
CC 128	260 - 268
CC 129	268 - 276
CC 130	276 - 284
CC 131	284 - 292
CC 132	292 - 300
CC 133	300 - 306
CC 141	306 - 311
CC 142	311 - 319
CC 143	319 - 327
CC 144	327 - 335
CC 145	335 - 343
CC 146	343 - 351
CC 147	351 - 359
CC 148	359 - 367
CC 149	367 - 375
CC 150	375 - 383
CC 151	383 - 391

CC	Frequency (MHz)
CC 152	391 - 399
CC 153	399 - 407
CC 154	407 - 415
CC 155	415 - 423
CC 156	423 - 431
CC 157	431 - 439
CC 158	439 - 447
CC 159	447 - 455
CC 160	455 - 463
CC 161	463 - 469

- When two CH/CC numbers correspond to one Channel number, choose either one according to the current COUNTRY setting. When the COUNTRY setting is other than FRANCE, choose a two-digit CH/CC number. When the COUNTRY setting is FRANCE, choose a three-digit CH/CC number.
- Find the CH/CC number (CC110 to CC161) corresponding to the TV channel (SECAM-L system) from a French cable TV station, based on the broadcast frequency of the TV channel. When you do not know the broadcast frequency, please contact the cable TV station.
- The CH/CC numbers of CH102-CH169 and CC110-CC161 correspond to the TV channels being broadcast by a SECAM-L system. The other CH/CC numbers correspond to the TV channels being broadcast by a method other than a SECAM-L system.

Troubleshooting

If a problem arises while you are using the TV, please read this troubleshooting guide carefully before you ask to have the TV repaired. You may be able to fix it easily by yourself. For example, if the mains plug is disconnected from the mains outlet, or the TV aerial has problems, you may think there is a problem with the TV itself.

Important:

- This troubleshooting guide only covers problems whose causes are not easy to decide. If you have a question when you are operating a function, read the page(s) for that function carefully, not this troubleshooting guide.
- If you follow the advice in this troubleshooting guide without any success, unplug the mains plug and ask for your TV to be repaired. Do not attempt to repair the TV by yourself or to remove the rear cover of the TV.

■ If you cannot turn on the TV

- Is the mains plug connected to the mains outlet?
- Is the power lamp lit? If not, press the ⏻ button on the TV.
- Make sure you set the VCR/TV/DVD switch to the TV position. You cannot turn the TV on when the VCR/TV/DVD switch is set to the VCR or DVD position.

■ If you cannot turn off the TV

- Make sure you set the VCR/TV/DVD switch to the TV position. You cannot turn the TV off when the VCR/TV/DVD switch is set to the VCR or DVD position.

■ No picture or no sound

- Have you chosen a TV channel with very poor reception? If so, the BLUE BACK function will be activated: the entire screen becomes blue, and the sound is muted. If you still want to view the TV channel, follow the description “BLUE BACK” on page 30 to change the BLUE BACK function setting to OFF.
- If the SYSTEM setting for a TV channel is incorrect, it may prevent the sound from being issued. Follow the description “EDIT/MANUAL” on page 32 to use the MANUAL function to try to change the SYSTEM setting.

■ Poor picture

- If noise (snow) totally blocks out the picture, there may be a problem with the aerial or aerial cable. Check the following to try to solve the problem:
  - Have the TV and aerial been connected properly?
  - Has the aerial cable been damaged?
  - Is the aerial pointing in the right direction?
  - Is the aerial itself faulty?
- If the TV or aerial suffers interference from other equipment, stripes or noise may appear in the picture. Move any equipment such as an amplifier, personal computer, or a hair drier, that can cause interference away from your TV. Or try moving the TV. If the aerial suffers interference from a radio tower or high-voltage wire, please contact your local dealer.
- If the TV suffers interference from signals reflecting from mountains or buildings, double-pictures (ghosting) will occur. Try to change the aerial’s direction or replace it with one with better directionality.
- Are your COLOUR SYSTEM settings correct? Follow the description “COLOUR SYSTEM” on page 26 to try to solve the trouble.
- Have the COLOUR and BRIGHT settings been adjusted properly? Follow the description “BRIGHT-2” and “COLOUR” on page 25 to try to adjust them properly.

- Videotaping teletext is not recommended because it may not record correctly.
- When viewing images from commercially available video software products, or videos from videotapes which have been recorded improperly, the top of the image may be distorted. This is due to the condition of the video signal. There is nothing wrong with the TV.
- Since this TV is designed to make full use of the resolution of the original video source, the motion may appear unnatural when the video source is input with progressive-scanning component signals. If this occurs, change the output setting of the connected device to interlace-scanning component signal output. See the instructions that came with the device for more information.

■ Poor sound

- Have you adjusted BASS or TREBLE properly? If not, follow the description “BASS” or “TREBLE” on page 28.
- When TV channel reception is poor, it can be hard to hear stereo or bilingual sound. In this case, follow the description “STEREO / I • II” on page 28 to hear the sound more easily by changing it to a mono sound.

■ If the TV does not respond to the remote control

- Have the batteries of the remote control worn out? Follow the description “Putting the batteries into the remote control” on page 7 and replace them with new batteries.
- Have you attempted to use the remote control from the sides or rear of the TV or from more than seven metres away from the TV? Use the remote control in front of your TV or from less than seven metres away.
- When you are viewing a teletext programme, you cannot operate the menus. Press the **TV** button to return to the ordinary TV programme, and then try operating the menus.
- If the TV suddenly stops responding, disconnect the power cord of the TV from the AC outlet. Connect them to the AC outlet again to turn on the TV. If the TV returns to a normal state, it is not a failure.

■ Other issues

- When the SLEEP TIMER function operates, the TV is automatically turned off. If the TV suddenly turns off, try to press the ⏻/I (standby) button to turn on the TV once again. If the TV goes back to normal, there is no problem.
- When the TV is receiving a wide-screen signal (WSS) or a signal from an external device affecting the screen size, the ZOOM mode automatically changes. When you want to resume the previous ZOOM mode, press the **ZOOM** button again.
- It takes a short period of time from the time an operation such as changing channels is performed until an image is displayed. This is not a fault. This is the time needed for the image to stabilize before it can be displayed.
- The TV may make a crackling sound due to a sudden change in temperature. The picture or sound may be normal. If you hear crackling sounds frequently while you are viewing the TV, there may be other causes. As a precaution, ask your service technician to inspect it.

- The top of the TV and the screen may become hot during use but this has no affect on the performance of the TV. Make sure that the ventilation holes are not blocked.
- When the picture is unstable, the screen may become white for a moment. This happens when the signal which drives the liquid crystal is missing. This is not a fault.
- When a still image has been displayed for a long period, a faint residual image may remain on the screen for a short time after the power has been turned off or when another image is displayed. This is not a fault and the image will eventually disappear.

Specifications

Model	LT-32A60BU/LT-32A60SU
Broadcasting systems	CCIR B/G, I, D/K, L
Colour systems	PAL, SECAM • The EXT terminals also support the NTSC 3.58/4.43 MHz system.
Channels and frequencies	F2-F10, F21-F69, 116-172, E2-E12, E21-E69, S1-S41, X, Y, Z, Z+1, Z+2, A-H, H+1, H+2, R1-R12, R21-R69 • French cable TV channel of broadcast frequencies 116 - 172 MHz and 220 - 469 MHz.
Sound-multiplex systems	NICAM (B/G, I, D/K, L) system, A2 (B/G, D/K) system
Teletext systems	FLOF (Fastext), TOP, WST (World Standard System)
Power requirements	110 - 240 V AC, 50/60 Hz
Power consumption	158 W (Standby: 2.1 W)
Screen size	Viewable area 80 cm (measured diagonally)
Audio output	Rated Power output: 5 W + 5 W
Speakers	6.6 cm round × 2
EXT-1 terminal	Euroconnector (21-pin, SCART) • Video input, Audio L/R inputs and RGB inputs are available. • TV broadcast outputs (Video and Audio L/R) are available.
EXT-2 terminal	Euroconnector (21-pin, SCART) • Video input, S-VIDEO (Y/C) input, Audio L/R inputs and RGB inputs are available. • Video and Audio L/R outputs are available. • T-V LINK functions are available.
EXT-3 terminal	RCA connectors × 3 S-VIDEO connector × 1 • Video input, S-VIDEO (Y/C) input and Audio L/R inputs are available.
EXT-4 terminal	RCA connectors × 3 + EXT-3 L/R • Component video (Y, Pb, Pr) input and Audio L/R inputs are available. • 625p, 525p, and 750p signals are available. 750p signal is only available for 60Hz. • Some DVD players can output 625p, 525p and 750p signals. • 750p are new high-definition signals.
PC INPUT terminal	Analog RGB D-SUB (15 pin) × 1 • PC signal is available. Refer to page 40 for details of the signals which can be input.
Headphone jack	Stereo mini-jack (3.5 mm in diameter)
Dimensions (W × H × D)	820 mm × 602 mm × 225 mm 820 mm × 551 mm × 126.8 mm (without stand)
Weight	18.8 kg 15.4 kg (without stand)
Accessories	Remote control unit × 1 (RM-C1816S) AA/R6 dry cell battery × 2

We may change the design and specifications without notice.

Pictures displayed on the screen using this TV's ZOOM functions should not be shown for any commercial or demonstration purpose in public places (cafes, hotels, etc.) without the consent of the owners of copyright of the original picture sources, as this would be an infringement of copyright.

Model	LT-26A60BU/LT-26A60SU
Broadcasting systems	CCIR B/G, I, D/K, L
Colour systems	PAL, SECAM • The EXT terminals also support the NTSC 3.58/4.43 MHz system.
Channels and frequencies	F2-F10, F21-F69, 116-172, E2-E12, E21-E69, S1-S41, X, Y, Z, Z+1, Z+2, A-H, H+1, H+2, R1-R12, R21-R69 • French cable TV channel of broadcast frequencies 116 - 172 MHz and 220 - 469 MHz.
Sound-multiplex systems	NICAM (B/G, I, D/K, L) system, A2 (B/G, D/K) system
Teletext systems	FLOF (Fastext), TOP, WST (World Standard System)
Power requirements	110 - 240 V AC, 50/60 Hz
Power consumption	125 W (Standby: 2.0 W)
Screen size	Viewable area 66 cm (measured diagonally)
Audio output	Rated Power output: 5 W + 5 W
Speakers	6.6 cm round × 2
EXT-1 terminal	Euroconnector (21-pin, SCART) • Video input, Audio L/R inputs and RGB inputs are available. • TV broadcast outputs (Video and Audio L/R) are available.
EXT-2 terminal	Euroconnector (21-pin, SCART) • Video input, S-VIDEO (Y/C) input, Audio L/R inputs and RGB inputs are available. • Video and Audio L/R outputs are available. • T-V LINK functions are available.
EXT-3 terminal	RCA connectors × 3 S-VIDEO connector × 1 • Video input, S-VIDEO (Y/C) input and Audio L/R inputs are available.
EXT-4 terminal	RCA connectors × 3 + EXT-3 L/R • Component video (Y, Pb, Pr) input and Audio L/R inputs are available. • 625p, 525p, and 750p signals are available. 750p signal is only available for 60Hz. • Some DVD players can output 625p, 525p and 750p signals. • 750p are new high-definition signals.
PC INPUT terminal	Analog RGB D-SUB (15 pin) × 1 • PC signal is available. Refer to page 40 for details of the signals which can be input.
Headphone jack	Stereo mini-jack (3.5 mm in diameter)
Dimensions (W × H × D)	686 mm × 525 mm × 225 mm 686 mm × 474 mm × 121.5 mm (without stand)
Weight	15.6 kg 12.4 kg (without stand)
Accessories	Remote control unit × 1 (RM-C1816S) AA/R6 dry cell battery × 2

We may change the design and specifications without notice.

Pictures displayed on the screen using this TV's ZOOM functions should not be shown for any commercial or demonstration purpose in public places (cafes, hotels, etc.) without the consent of the owners of copyright of the original picture sources, as this would be an infringement of copyright.

JVC

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LCT1860-001B-U
0405TKH-CR-MU

JVC

InteriArt

LT-32A60SJ
LT-26A60SJ

T-V LINK

WIDE LCD PANEL TV

INSTRUCTIONS

■ Warning

DO NOT cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or adaptor or consult your dealer.

If nonetheless the mains plug is cut off, remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

If a new mains plug has to be fitted, then follow the instruction given below:

Important

Do not make any connection to the larger terminal which is marked with the letter E or by the safety earth symbol ⏚ or coloured green or green-and-yellow.

The wires in the mains lead on this product are coloured in accordance with the following code:
Blue: Neutral
Brown: Live

As these colours may not correspond with the coloured marking identifying the terminals in your plug proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

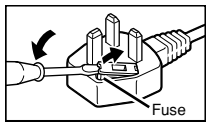
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

When replacing the fuse, use only a correctly rated approved type and always re-fit the fuse cover.

■ If in doubt — consult a competent electrician.

How to replace the fuse

Open the fuse compartment with a blade screwdriver, and replace the fuse.



■ Guidelines for safe operation

This equipment has been designed and manufactured to comply with international safety standards. However, as with any electrical appliance, care must be taken to ensure optimal results and operational safety.

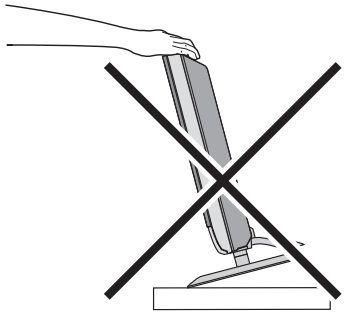
- Before attempting to use this equipment, read the operating instructions thoroughly.
- Ensure that all electrical connections (including the mains plug, extension leads, etc.) have been made in accordance with the manufacturer's instructions.
- If ever in doubt about the installation, operation or safety of this equipment, consult your dealer.
- Handle all glass panels or covers with care.
- Never operate this equipment if it appears damaged or operates abnormally. Turn the power off, disconnect the main power plug and consult your dealer.
- Never remove any affixed panels or covers. Doing so may result in electrical shock.
- Never leave this equipment operating unattended unless otherwise specifically stated that it is designed to do so or in standby mode. Only use the designated power switch to turn off the power and ensure that all potential users are instructed how to do so. Make special arrangements for infirm or handicapped persons.
- Never watch TV while operating a motor vehicle. It is illegal to watch TV while driving.
- Never listen to headphones at high volume. Doing so may damage your hearing.
- Never obstruct the ventilation of this equipment. Doing so may cause overheating and result in a malfunction or damage.
- Never use makeshift stands or attempt to affix legs with wood screws. When using a manufacturer's approved stand or legs, use only the fixtures provided and follow the installation instructions.
- Never allow this equipment to be exposed to rain or moisture.
- Never allow anyone, especially children, to insert anything into an opening in the case. Doing so may result in a fatal electrical shock.
- Never guess or take chances with electrical equipment of any kind. It is better to be safe than sorry.

Thank you for buying this JVC LCD flat television.
To make sure you understand how to use your new TV, please read this manual thoroughly before you begin. (“LCD” stands for Liquid Crystal Display.)

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

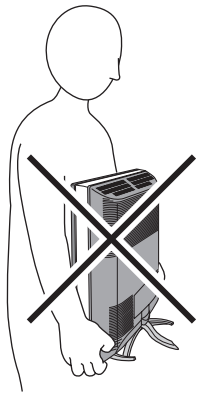
WARNING

- The TV may fall causing injuries. Hold the bottom of the stand with your hand and tilt the TV up and down.
- Do not allow children to hang from the TV, place their elbows on the TV or lean against the TV. Doing so may cause the TV to fall over and lead to injuries.



CAUTION

- The TV screen may be damaged if the TV is carried as shown in the diagram below.
  The TV should always be carried by two people.

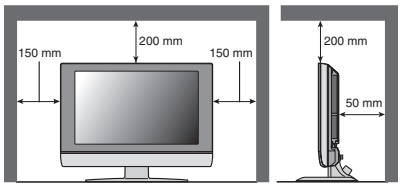


Pixel defects

LCDs use collections of fine points (“pixels”) to display images. While there is no problem with more than 99.99% of these pixels, please understand that a very small number of pixels may not light, or may light all the time.

Distance recommendations

Avoid improper installation and never position the unit where good ventilation is impossible.
When installing this TV, distance recommendations must be maintained between the set and the wall, as well as inside a tightly enclosed area or piece of furniture. Keep to the minimum distance guidelines shown for safe operation.



Failure to take the following precautions may cause damage to the television or remote control.

DO NOT block the TV's ventilation openings or holes.
(If the ventilation openings or holes are blocked by a newspaper or cloth, etc., the heat may not be able to get out.)

DO NOT place anything on top of the TV.
(such as cosmetics or medicines, flower vases, potted plants, cups, etc.)

DO NOT allow objects or liquid into the cabinet openings.
(If water or liquid is allowed to enter this equipment, fire or electric shock may be caused.)

DO NOT place any naked flame sources, such as lighted candles, on the TV.

DO NOT subject the TV to direct sunlight.

The surface of the TV screen is easily damaged. Be very careful with it when handling the TV. Should the TV screen become soiled, wipe it with a soft dry cloth. Never rub it forcefully. Never use any cleaner or detergent on it.

If there is a fault, unplug the unit and call a service technician. Do not attempt to repair it yourself or remove the rear cover.

■ Cleaning the screen

The screen is coated with a special thin film to reduce reflection. If this film is damaged, uneven colors, discoloration, scratches, and other problems that cannot be repaired may occur. Pay attention to the following when handling the screen.

- Do not use glue or adhesive tape on the screen.
- Do not write on the screen.
- Do not allow the screen to come in contact with any hard objects.
- Do not allow condensation to form on the screen.
- Do not use alcohol, thinner, benzene or other solvents on the screen.
- Do not rub the screen hard.

CAUTION:

- Operate only from the power source specified (AC 110 – 240 V, 50/60 Hz) on the unit.
- Avoid damaging the AC plug and power cord.
- When you are not using this unit for a long period of time, it is recommended that you disconnect the power cord from the main outlet.

CONTENTS

Setting up your TV 4
- Installation 4
- Using the stand 4
- Removing the terminal cover 5
- Connecting the aerial and video cassette recorder (VCR) 6
- Connecting the power cord to the AC outlet 7
- Putting the batteries into the remote control 7
- Initial settings 7
- T-V LINK functions 10

TV buttons and functions 12
- Turn the TV on from standby mode 12
- Choose a TV channel 12
- Watch images from external devices 12
- Adjust the volume 13
- Using the Menu 13

Remote control buttons and functions 14
- Turn the TV on or off from standby mode 14
- Choose a TV channel and watch images from external devices 15
- Adjust the volume 16
- Information function 16
- ZOOM function 17
- 3D SOUND function 18
- Return to TV channel instantly 18
- Favourite channel function 19
- Operating a JVC brand VCR or DVD player 20

Teletext function 21
- Basic operation 21
- Using the List Mode 21
- Hold 22
- Sub-page 22
- Reveal 22
- Size 22
- Index 23
- Cancel 23

Using the TV's menu 24
- Basic operation 24

PICTURE menu 25
- PICTURE MODE 25
- BRIGHT-1 25
- CONTRAST 25
- BRIGHT-2 25
- SHARP 25
- COLOUR 25
- HUE 25
- COLOUR TEMP. 25
- FEATURES 26

SOUND menu 28
- STEREO / I • II 28
- BASS 28
- TREBLE 28
- BALANCE 28
- 3D SOUND 28

FEATURES menu 29
- SLEEP TIMER 29
- CHILD LOCK 29
- APPEARANCE 30
- BLUE BACK 30
- FAVOURITE SETTING 31

SET UP menu 32
- AUTO PROGRAM 32
- EDIT/MANUAL 32
- LANGUAGE 36
- DECODER (EXT-2) 36
- EXT SETTING 37

Displaying a computer screen 40
- Connecting to the computer 40
- Watching images from a computer 40
- Table of signals for each type of computer 40

Additional preparation 41
- Connecting external equipment 41

CH/CC numbers 44

Troubleshooting 46

Specifications 49

Setting up your TV

- When you install the TV on the wall, only use a JVC wall mounting unit (optional) which is designed for this TV.
- Make sure that the TV is installed on the wall by a skilled installer.

Installation

Cautions for installation

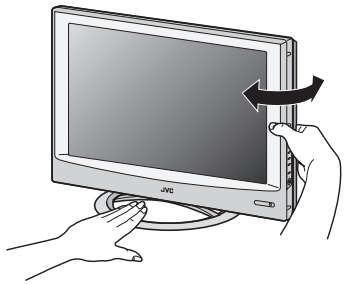
- Install the TV in a corner on a wall or on the floor so as to keep cords out of the way.
- The TV will generate a slight amount of heat during operation. Ensure that sufficient space is available around the TV to allow satisfactory cooling. See “Distance recommendations” on page 1.

Using the stand

This TV comes with a table top stand already attached.
This stand can be used to adjust the direction of the TV screen to the left or right.

■ Rotate the TV to the left and right:

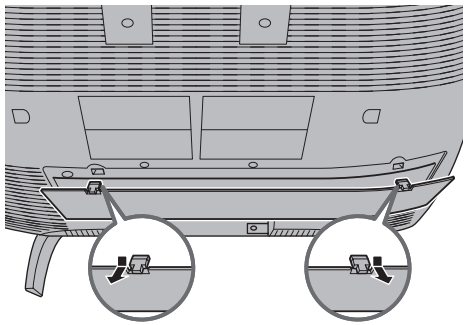
While holding the bottom of the stand with one hand, use your other hand to hold the edge of the panel and slowly adjust the direction of the TV screen.



Removing the terminal cover

There are connection terminals behind the cover on the rear of the TV. Remove the cover before connecting an antenna or VCR.

Remove the cover by removing the hooks. When replacing the cover, place the side of the cover against the TV and insert the hooks.



- Leave the cover off if they do not fit properly. Do not force to replace the cover. Doing so may cause damage to the connection cables and the cover.

Connecting the aerial and video cassette recorder (VCR)

- The connecting cables are not provided.
- For further details, refer to the manuals provided with the devices to be connected.

Caution

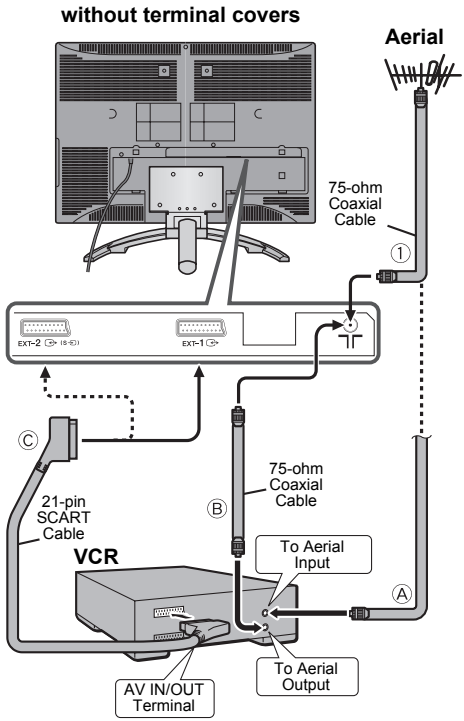
- Turn off all the equipment including the TV before connecting anything.

■ **If you are connecting a VCR, follow Ⓐ → Ⓑ → Ⓒ in the diagram opposite.**

■ **If you are not connecting a VCR, follow ①.**

To use the T-V LINK functions, you must have a T-V LINK compatible VCR connected by a SCART cable Ⓒ to the EXT-2 terminal on the TV. For details about T-V LINK functions, see "T-V LINK functions" on page 10.

- You can watch a video using the VCR without doing Ⓒ. For details, see your VCR instruction manual.
- To connect more equipment, please see "Connecting external equipment" on page 41.
- If you connect a decoder to a T-V LINK compatible VCR, set the DECODER (EXT-2) function to ON. For details, see "DECODER (EXT-2)" on page 36. Otherwise, you will not be able to watch scrambled channels.



Connecting the power cord to the AC outlet

Insert the AC plug on the power cord from the TV into an AC outlet.

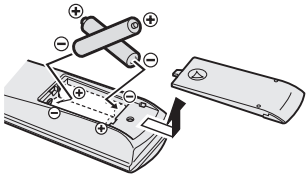
Caution

- Operate only from the power source specified (AC 110 – 240 V, 50/60 Hz) on the unit.

- Remove the AC plug from the outlet to completely disconnect the TV from the power supply.

Putting the batteries into the remote control

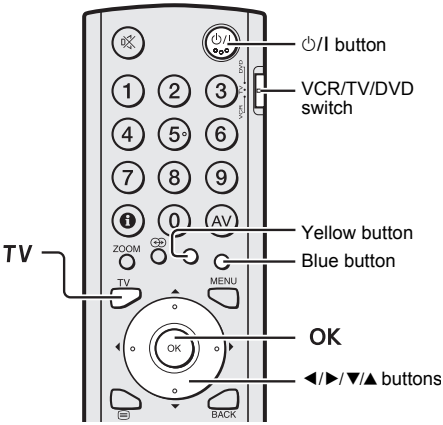
Use two AA/R6 dry cell batteries.
Insert the batteries from the ⊖ end, making sure the ⊕ and ⊖ polarities are correct.



- Follow the warnings printed on the batteries.
- Battery life is about six months to one year, depending on how much you use the remote control.
- The batteries we supply are only for setting up and testing your TV, please replace them as soon as you need to.
- If the remote control does not work properly, replace the batteries.

Initial settings

When the TV is first turned on, it goes into the initial settings mode, and you will see the JVC logo. Follow the instructions on the screen display to make the initial settings.



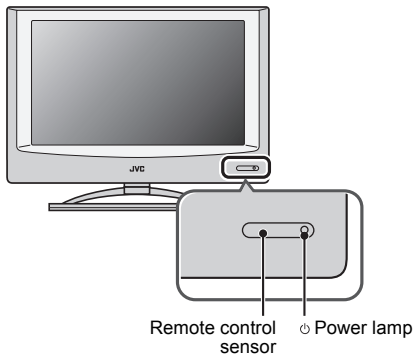
1 Make sure to set the VCR/TV/DVD switch on the remote control to the TV position

- You cannot turn the TV on when the VCR/TV/DVD switch is set to the VCR or DVD position.

2 Press the ⏻/I button on the remote control

The TV turns on from standby mode and the JVC logo is displayed.

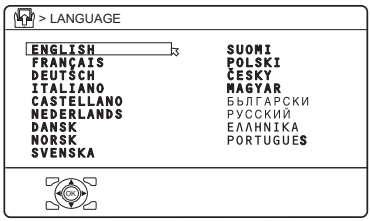
- Check that the AC plug on the power cord from the TV is connected to AC outlet.



- If the JVC logo does not appear this is because your TV has already been turned on for the first time: use the “LANGUAGE” and “AUTO PROGRAM” functions to make the initial settings. For details, see “SET UP menu” on page 32.

3 Press the OK button

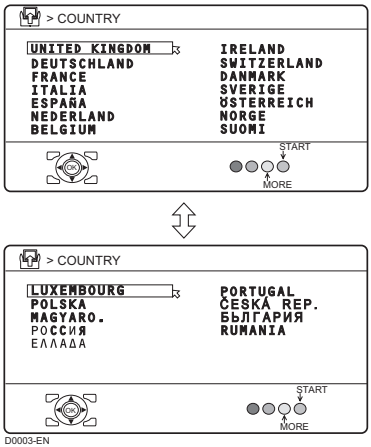
The LANGUAGE menu appears.



D0002(E)-EN

4 Press the ▼/▲ buttons to choose ENGLISH. Then press the OK button

The on-screen display will then be in English.
The COUNTRY menu appears as a sub-menu of the AUTO PROGRAM function. There are two COUNTRY menus. Pressing the yellow button changes the COUNTRY menu as follows:

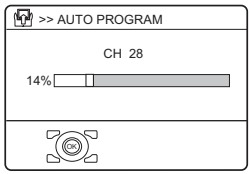


D0003-EN

5 Press the ◀/▶ and ▼/▲ buttons to choose the country where you are

6 Press the blue button to start the AUTO PROGRAM function

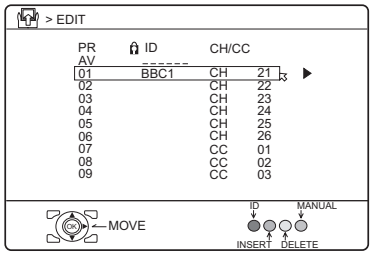
The AUTO PROGRAM menu appears and received TV channels are automatically stored in the programme numbers (PR).



D0004-EN

- To cancel the AUTO PROGRAM function:
  Press the TV button.

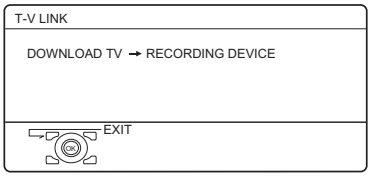
After the TV channels have been registered in the programme numbers (PR), the EDIT menu appears



D0038-EN

- If you want to, you can now edit the programme numbers (PR) using the EDIT/MANUAL function. For details, see “EDIT/MANUAL” on page 32.
- If you do not want to edit programme numbers (PR), go to the next step.
- When the COUNTRY setting is UNITED KINGDOM, channels other than CH 21 to CH 69 (E21-E69) cannot be registered by AUTO PROGRAM.

7 Press the OK button to display the T-V LINK menu



D0005-EN

If you do not have a T-V LINK compatible VCR connected:
Press the **TV** button to exit the T-V LINK menu.
The T-V LINK menu disappears.

If you have a T-V LINK compatible VCR connected to the EXT-2 terminal:
Follow the operating procedure "Downloading the data to VCR" on page 10 to transmit the Programme number (PR) data.

Now, the initial settings are complete, and you can watch the TV

- If your TV can detect the TV channel name from the TV channel broadcast signal, the TV channel name is assigned to the programme number (PR) to which the TV channel has been set. However, which TV channels are set to which programme numbers (PR) will depend on the area in which you live.
- If a TV channel you want to view is not set to a programme number (PR), you can set it using the MANUAL function. For details, see "EDIT/MANUAL" on page 32.
- The AUTO PROGRAM function does not set the programme number PR 0 (AV) for your video cassette recorder. You will need to set this using the MANUAL function.

For users in the UK:
If you have any problems setting up your new TV, please call the JVC Helpline on **0870 330 5000**.

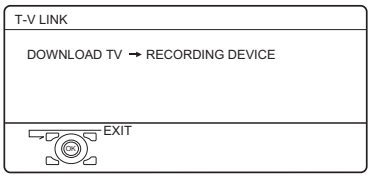
For users in the Republic of Ireland:
If you have any problems setting up your new TV, please call the JVC Helpline on **1890-582500**.

■ Downloading the data to VCR

You can transmit to the latest Programme numbers (PR) data to a VCR with the T-V LINK function.

Caution

- This only works when a T-V LINK compatible VCR is connected to the EXT-2 terminal.
- This only works when the T-V LINK menu is being displayed.

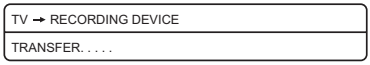


D0005-EN

1 Turn on the VCR

2 Press the OK button

The data transmission begins.



D0037-EN

The T-V LINK menu disappears once the data transmission ends.

When the T-V LINK menu is changed over to another menu:

The TV has finished its menu. This new menu is operated from the VCR. See the VCR instruction manual for what to do next.

If "FEATURE NOT AVAILABLE" appears at the T-V LINK menu:

Check the following three items. Then press the ◀ button to retry data transmission.

- Has a T-V LINK compatible VCR been connected to the EXT-2 terminal?
- Has the VCR power been turned on?
- Does the SCART cable that is connected to the EXT-2 terminal to T-V LINK compatible VCR have all its proper connections?

T-V LINK functions

When you have a T-V LINK compatible VCR connected to the EXT-2 Terminal on the TV, it is easier to set up the VCR and to view videos. T-V LINK uses the following features:

To use T-V LINK functions:

A "T-V LINK compatible VCR" means a JVC video cassette recorder with the T-V LINK logo, or with one of the following logos. However, these VCRs may support some or all of the features described earlier. For details, see your VCR instruction manual.

"Q-LINK" (a trademark of Panasonic Corporation)
"Data Logic" (a trademark of Metz Corporation)
"Easy Link" (a trademark of Phillips Corporation)
"Megalogic" (a trademark of Grundig Corporation)
"SMARTLINK" (a trademark of Sony Corporation).

■ Pre-set download

The VCR will automatically download the registered data on the TV channels from the TV. This means you do not need to set up the program channels on your VCR manually. The preset download function automatically begins when the initial setting is complete or whenever you carry out the AUTO PROGRAM or EDIT/MANUAL functions.

You can also carry out this function using your VCR controls.

When "FEATURE NOT AVAILABLE" is displayed:

If "FEATURE NOT AVAILABLE" is displayed, the download was not performed correctly. Before trying to download again, check that:

- the VCR power is turned on
- the VCR is T-V LINK compatible
- the VCR is connected to the EXT-2 terminal
- the SCART cable is fully wired.

■ Direct Rec

"What You See Is What You Record"

You can easily record to VCR the images that you are watching on the TV.

For details, read the manual for your VCR. Use your VCR controls. "DEVICE IS RECORDING" is displayed.

In the following situations, the VCR will stop recording if the TV is turned off, if the TV channel or input is changed, or if the menu is displayed on the TV:

- when recording images from an external device connected to the TV (for example a camcorder)
- when recording a TV channel after it has been unscrambled on a decoder
- when recording a TV channel by using the TV's output because the VCR's own tuner cannot properly receive that channel.

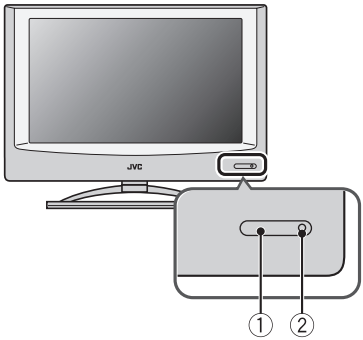
You cannot carry out Direct Rec using your TV's control.
Generally, the VCR cannot record a TV channel that it cannot receive properly on its own tuner, even if you can view that TV channel on the TV. However, some VCRs can record a TV channel by using the TV's output if that channel can be viewed on the TV. For details, see your VCR instruction manual.

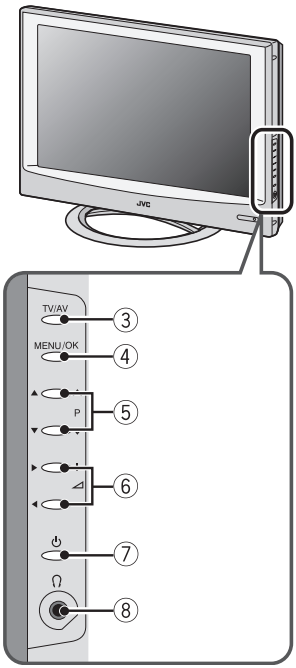
When the VCR is not ready, the following messages are displayed.

ERROR MESSAGE	Cause and countermeasure
NO RECORDING	The VCR is not able to record. Check the VCR.
NO RECORDING POSSIBLE	The TV input is set to EXT-4 or PC. Since the EXT-4 picture or PC picture cannot be output to EXT-2, DIRECT REC is not possible.
NO RECORDING, MEDIA PROBLEM	The recording device is not ready to record. Check the VCR tape.
NO RECORDING, DEVICE BUSY	The recording device cannot record as it is recording or playing. Check the VCR.

Refer to the VCR instruction manual.

TV buttons and functions





Refer to the pages in parentheses for details.

① Remote control sensor
② Power lamp (page 7)
③ TV/AV button (page 12)
④ MENU/OK button (pages 13, 24)
⑤ P ∨/∧ buttons (page 12)
⑥ ◿ (Volume) −/+ buttons (page 13)
⑦ ⏻ (Stand by) button (page 12)
⑧ Headphone jack (mini jack) (page 41)

Turn the TV on from standby mode

Press the ⏻ button or the P ∨/∧ buttons to turn the TV on from standby mode.
When the TV is turned on, the power lamp lights blue.

To turn the TV off:
Press the ⏻ button again.
The power lamp goes off.

Caution

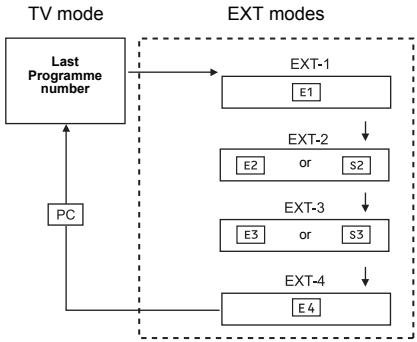
- The ⏻ button on the TV does not fully isolate the TV from the AC supply. If you are not going to use the TV for a long period, be sure to disconnect the AC plug from the AC socket.

Choose a TV channel

Press the P ∨/∧ buttons to choose a programme number (PR) or an EXT terminal

Watch images from external devices

Press the TV/AV button to choose an EXT terminal



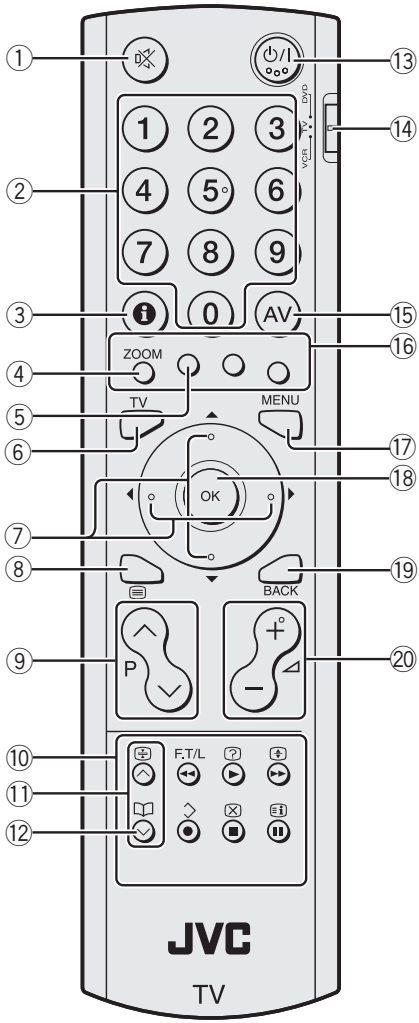
Adjust the volume

Press the ◿ (Volume) −/+ buttons
The volume level indicator appears.

Using the Menu

Use the MENU/OK button
Refer to “Using the TV’s menu” (see page 24) for details of using the menu.

Remote control buttons and functions



① Muting button
② Number buttons
③ Information button
④ **ZOOM** button
⑤ ⊛ button
⑥ ***TV*** button
⑦ ◄/►/▼/▲ buttons
⑧ ≡ (Text) button
⑨ **P** ∨/∧ buttons
⑩ VCR/DVD/Teletext control buttons
⑪ ∨/∧ buttons
⑫ 🕮 (Favourite) button
⑬ ⏻/**I** (Standby) button
⑭ VCR/TV/DVD switch
⑮ **AV** button
⑯ Colour buttons
⑰ **MENU** button
⑱ **OK** button
⑲ **BACK** button
⑳ ◿ (Volume) −/+ buttons

Turn the TV on or off from standby mode

Press the ⏻/I (standby) button to turn the TV on or off

When the TV is turned on, the power lamp lights blue.

- The power can be turned on by pressing the ***TV*** button, **P** ∨/∧ buttons or Number buttons.

To turn the TV on or off, set the VCR/TV/DVD switch on the remote control to the TV position and press the ⏻/I button.
If the VCR/TV/DVD switch on the remote control is set to a position other than TV, the TV will not be turned on or off even if the ⏻/I button is pressed.

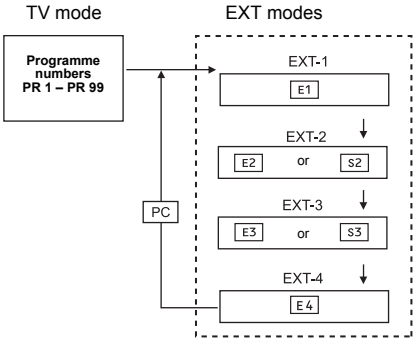
Choose a TV channel and watch images from external devices

■ **Use the number buttons:**
Enter the programme number (PR) of the channel using the number buttons.

Example:
- PR 6 → press ***6***
- PR 12 → press ***1*** and ***2***

■ **Use the P ∨/∧ buttons:**
Press the P ∨/∧ buttons to choose the programme number (PR) you want or an EXT terminal.

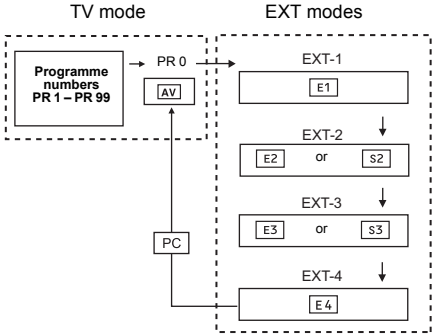
■ **Use the AV button:**
Press the AV button to choose an EXT terminal.



- You can choose a video input signal from the S-VIDEO signal (Y/C signal) and regular video signal (composite signal). For details, see “S-IN (S-VIDEO input)” on page 37.
- If you do not have a clear picture or no colour appears, change the colour system manually. See “COLOUR SYSTEM” on page 26.
- If you choose an EXT terminal with no input signal, the EXT terminal number becomes fixed on the screen.
- Since this TV is designed to make full use of the resolution of the original video source, the motion may appear unnatural when the video source is input with progressive-scanning component signals. If this happens, change the output setting of the connected device to interlace-scanning component signal output. See the instructions that came with the device for more information.
- The PC sound is the same as the EXT-3 sound.

To return to a TV channel:
Press the ***TV*** button, the ▼/▲ buttons or the number buttons.

To use the programme number PR 0 (AV):
When the TV and VCR are connected only by the aerial cable, choosing the programme number PR 0 (AV) allows you to view images from the VCR. Set the VCR RF channel to the programme number PR 0 (AV) manually. For details, see “EDIT/MANUAL” on page 32.
Pressing the ***AV*** button changes the choice as follows:



- The VCR sends its playback image along the aerial cable as an RF (radio frequency) signal.
- Also see your VCR instruction manual.

Adjust the volume

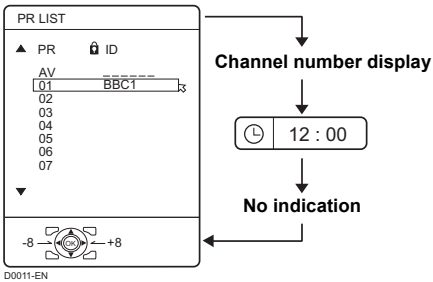
Press the ◿ −/+ buttons to adjust the volume.
The volume level indicator appears and the volume changes as you press the ◿ −/+ buttons.

■ **Muting the sound**
Press the 🔇 (muting) button to turn off the sound.
Pressing the 🔇 (muting) button again restores the previous volume level.

Information function

You can see the channel number of the programme you are watching, the current time or the PR LIST.
From the PR LIST, you can choose a channel or EXT terminal.

Press the ⓘ (Information) button to display the information you want to see.
Pressing the ⓘ (Information) button changes the display as follows:



Channel number display:
The channel number and channel name (when the channel name is registered) of the programme you are watching or the EXT terminal number is displayed.

Time display:
The current time of the teletext data is displayed.
If the TV has not received a TV channel that has teletext programmes since it was turned on, the time display is blank. To view the current time, choose a TV channel that has teletext programmes.

- An incorrect current time is sometimes displayed when watching videos.

PR LIST:
The programme number (PR) and EXT terminal list is displayed.
Pressing the **OK** button after choosing the programme number (PR) or EXT terminal with the ◄/►/▼/▲ buttons will display the chosen programme or EXT terminal.

- For programme numbers (PR) for which the CHILD LOCK function is set, the 🔒 (CHILD LOCK) mark is displayed. For details see “CHILD LOCK” on page 29.
- For programme numbers (PR) which is registered as a favourite channel, the 🕮 (favourite) mark is displayed. For details see “Favourite channel function” on page 19.

ZOOM function

You can change the screen size according to the picture aspect ratio. Choose the optimum one from the following ZOOM modes.

- The ZOOM mode is fixed at FULL when you are using the TV as a PC screen.

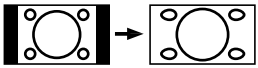
AUTO:
When a WSS (Wide Screen Signalling) signal, which shows the aspect ratio of the picture, is included in the broadcast signal or the signal from an external device, the TV automatically changes the ZOOM mode to 16:9 ZOOM mode or FULL mode according to the WSS signal.
If a WSS signal is not included, the picture is displayed according to the ZOOM mode set with the 4:3 AUTO ASPECT function.

- For details of the 4:3 AUTO ASPECT function, see “4:3 AUTO ASPECT” on page 27.
- When the AUTO (WSS) mode does not function correctly due to poor WSS signal quality or when you want to change the ZOOM mode, press the **ZOOM** button and change to another ZOOM mode.

REGULAR:
Use to view a normal picture (4:3 aspect ratio) as this is its original shape.

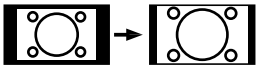


PANORAMIC:
This stretches the left and right sides of a normal picture (4:3 aspect ratio) to fill the screen, without making the picture appear unnatural.

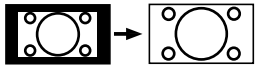


- The top and bottom of the picture are slightly cut off.

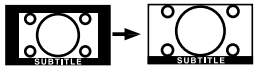
14:9 ZOOM:
This zooms up the wide picture (14:9 aspect ratio) to the upper and lower limits of the screen.



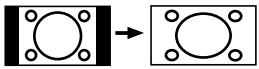
16:9 ZOOM:
This zooms up the wide picture (16:9 aspect ratio) to the full screen.



16:9 ZOOM SUBTITLE:
This zooms up the wide picture (16:9 aspect ratio) with subtitles to the full screen.



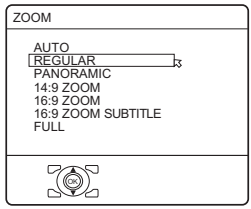
FULL:
This uniformly stretches the left and right sides of a normal picture (4:3 aspect ratio) to fill the wide TV screen.



- For 16:9 aspect ratio pictures that have been squeezed into a normal picture (4:3 aspect ratio), use the FULL mode to restore the picture to its original shape.

■ Choose the ZOOM mode

1 Press the ZOOM button to display the ZOOM menu



2 Press the ▼/▲ buttons to choose a ZOOM mode. Then press the OK button

The picture expands and the chosen ZOOM mode is displayed in about 5 seconds.

- The ZOOM mode may be automatically changed by the control signal from an external device. When you want to return to the previous ZOOM mode, choose the ZOOM mode again.

■ Adjusting the visible area of the picture

If subtitles or the top (or bottom) of the picture are cut off, you can adjust the visible area of the picture manually.

1 Press the ZOOM button

The ZOOM menu appears.

2 Press the OK button to display the ZOOM mode indicator

The indicator appears.



D0010-EN

3 While it is displayed, press the ▼/▲ buttons to change the position of the picture

- You cannot adjust the visible area in REGULAR or FULL mode.

The visible area adjustment is saved even after the TV channel is changed.
However, it is cancelled if the following operations are performed.

- The power is turned off/on
- The ZOOM mode is changed
- (Text) button is pressed
- The TV is switched between TV mode and EXT mode

3D SOUND function

You can enjoy sounds with a wider ambience.

- This function does not work for the sound from headphones.

Press the button to select one of 3D SOUND modes

ON:
When you listen to stereo sound, please select ON mode.
You can enjoy sound similar to the experience at the theatre.

MONO:
Select the MONO mode, when you listen to the mono sound.
You can enjoy the sound for a wider audience similar to stereo sound.

OFF:
The 3D SOUND function switches off.

- You can choose the 3D SOUND mode with the “SOUND menu” (see page 28).

Return to TV channel instantly

You can return to a TV channel instantly.

Press the TV button

The TV returns to the TV mode and a TV channel appears.

Favourite channel function

You can register your favourite TV channels (PR 1 – PR 99) in the number buttons 1 to 4. After registering, the channel can be called by pressing the 🕮 (favourite) button and a number button 1 to 4.

■ Favourite channel registration

1 In the normal screen, choose a TV channel (PR 1 – PR 99) that you want to register

For details, refer to "Choose a TV channel and watch images from external devices" on page 15.

2 Press and hold the 🕮 (favourite) button for three seconds or more

Then "SET 1-4?" appears on the screen.

3 Press one of the number buttons 1 to 4

The current channel is registered in the pressed number button.
After "PROGRAMMED!" appears on the screen, the favourite channel icon appears at the top-right of the screen.

- If the channel you are trying to register is already registered in one of the other number buttons 1 to 4, "NOT AVAILABLE" appears on the screen.
- Channels locked with the CHILD LOCK function cannot be registered.
- If AUTO PROGRAM is performed, the registered favourite channels are reset.

- When you want to delete a favourite channel, delete the set channel and set contents with FAVOURITE SETTING (see page 31) in the FEATURES menu.

■ Calling the favourite channel

1 In the normal screen, press the 🕮 (favourite) button

Then "FAVORITE1-4?" appears.

2 Press one of the number buttons 1 to 4

The called favourite channel appears on the screen.

- If a number button in which no channel is registered is pressed, "NO MEMORY" appears on the screen.

■ Setting the picture effect

When a favourite channel has been chosen with the 🕮 (favourite) button and number buttons 1 to 4, picture effect settings can be memorised for each favourite channel by setting the picture effects in the PICTURE menu (see page 25).
The following items in the PICTURE menu (see page 25) are memorised.
PICTURE MODE
BRIGHT-1
CONTRAST
BRIGHT-2
SHARP
COLOUR
HUE
COLOUR TEMP.
DIGITAL VNR
COLOUR SYSTEM
The last setting made for each item is memorised.

Operating a JVC brand VCR or DVD player

These buttons will operate a JVC brand VCR or DVD player. Pressing a button that looks the same as the device's original remote control button has the same effect as the original remote control.

1 Set the VCR/TV/DVD Switch to the VCR or DVD position

VCR:

When you are operating the VCR, set the switch to the VCR position.

- You can turn the VCR on or off with the ⏻/I (standby) button.

DVD:

When you are operating the DVD player, set the switch to the DVD position.

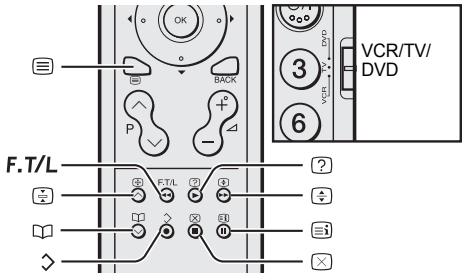
- You can turn the DVD player on or off with the ⏻/I (standby) button.
- You can also press the **MENU** or **TOP MENU** button and display the DVD disc menu screen, and then operate by pressing the ◄/►/▼/▲ buttons.

2 Press the VCR/DVD Control Button to control your VCR or DVD player

- If your device is not made by JVC, these buttons will not work.
- Even if your device is made by JVC, some of these buttons may not work, depending on the device you are using.
- You can use the ∨/∧ buttons to choose a TV channel the VCR will receive, or choose the chapter the DVD player plays back.
- Some models of DVD player use the ∨/∧ buttons for both operating the fast forward/backward functions and for choosing the chapter. In this case, the ◄◄/►► buttons do not work.

You cannot turn the TV on or off when the VCR/TV/DVD switch is set to the VCR or DVD position.
When you turn the TV on or off, set the VCR/TV/DVD switch to the TV position.

Teletext function



Basic operation

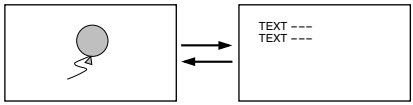
1 Choose a TV channel with a teletext broadcast

2 Set the VCR/TV/DVD switch to the TV position



3 Press ☰ (Text) button to display the teletext

Pressing ☰ (Text) button changes the mode as follows:



TV mode Text mode

4 Choose a teletext page by pressing the P ∨/∧ buttons, number buttons or colour buttons

To return to the TV mode:
Press the **TV** button or ☰ (Text) button.

- If you have trouble receiving teletext broadcasts, consult your local dealer or the teletext station.
- The ZOOM function will not work in the TV and text mode or Text mode.
- You cannot operate menus when viewing a teletext programme.
- Language display depends on the country which was set on the COUNTRY menu. If characters on a Teletext programme do not appear properly, change the COUNTRY setting to other country's. To change the COUNTRY setting, perform steps 1 and 2 of the "AUTO PROGRAM" procedure on page 32 and then press the **OK** button.

Using the List Mode

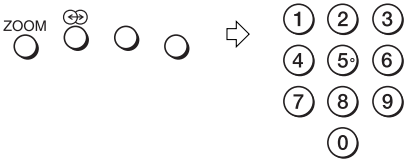
You can store the numbers of your favourite teletext pages in memory and call them up quickly using the colour buttons.

■ To store the page numbers:

1 Press *F.T/L* button to go into the List mode

The page numbers you have stored are displayed at the bottom of the screen.

2 Press a colour button to choose a position. Then press the number buttons to enter the page number



3 Press and hold down the ◇ (Store) button

The four page numbers blink white to show that they are stored in memory.

■ To call up a stored page:

1 Press the *F.T/L* button to enter the List mode

2 Press a colour button having a stored page

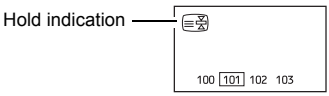


To exit the List mode:
Press the ***F.T/L*** button again.

Hold

You can hold a teletext page on the screen for as long as you want, even while several other teletext pages are being received.

Press the ⊡ (Hold) button



To cancel the Hold function:
Press ⊡ (Hold) button again.

Sub-page

Some teletext pages include sub-pages that are automatically displayed.
You can hold any sub-page, or view it at any time.

1 Press the 🕮 (Favourite) button to operate the Sub-page function

2 Press the Number buttons to enter a sub-page number

Example:

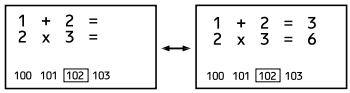
- 3rd sub-page → press **0**, **0**, **0** and **3**.

To cancel the Sub-page function:
Press the 🕮 (Favourite) button again.

Reveal

Some teletext pages include hidden text (such as answers to a quiz).
You can display the hidden text.

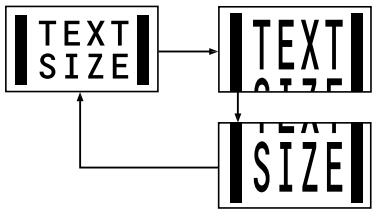
Each time you press the ? (Reveal) button, text is hidden or revealed



Size

You can double the height of the teletext display.

Press the ⊡ (Size) button



Index

You can return to the index page instantly.

Press the ▤ (Index) button
Returns to page 100 or a previously specified page.

Cancel

You can search for a teletext page while watching TV.

1 Press the number button to enter a page number, or press a colour button
The TV searches for a teletext page.

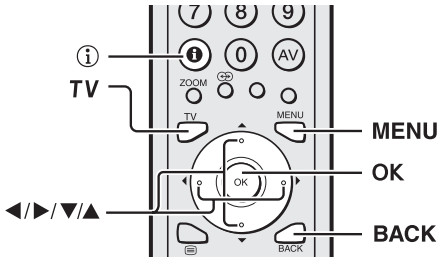
2 Press ⊠ (Cancel) button
The TV programme appears. When the TV finds the teletext page, its page number appears in the upper left of the screen.

3 Press ⊠ (Cancel) button to return to a teletext page when the page number is on the screen
- The TV mode cannot be resumed by pressing the ⊠ (Cancel) button. To return to the TV mode press **TV**.

Using the TV's menu

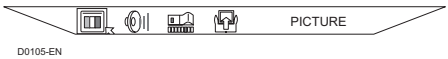
This TV has a number of functions you can operate using menus. To use all your TV's functions, you need to understand the basic menu operating techniques fully.

Buttons used to operate the menus



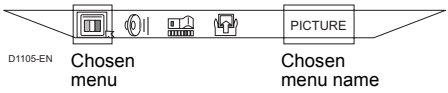
Basic operation

1 Press the MENU button to display the menu bar



D0105-EN

2 Press the ◄/► buttons to choose the menu you want to use and then press the OK button



D1105-EN

3 Press the ▼/▲ buttons to choose the item to be set, press the ◄/► buttons to set the item, and then press the OK button

If there are sub-menus, use the ◄/►/▼/▲ buttons to operate them.

- Press the **BACK** button to return to the previous menu.
- Press the **TV** or **MENU** button to exit from the menu.
- Some menu items may not be operated or set depending on the TV status or other menu item settings.
  Menu items that cannot be operated or set are displayed in grey in the menu and cannot be chosen.

Types of menu


D0106

PICTURE menu
Choose to set the screen settings.


D0107

SOUND menu
Choose to set the sound settings.


D0108

FEATURES menu
Choose to set the sleep timer and child lock settings.

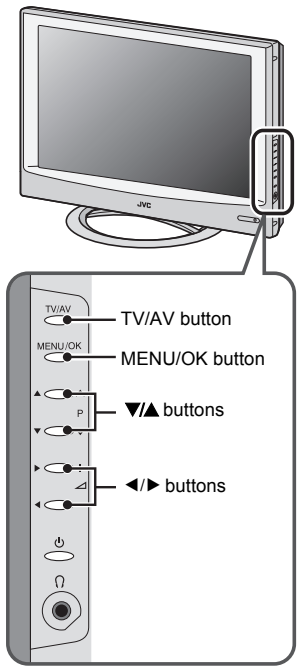

D0109

SET UP menu
Choose to edit the channels or set the display language settings.

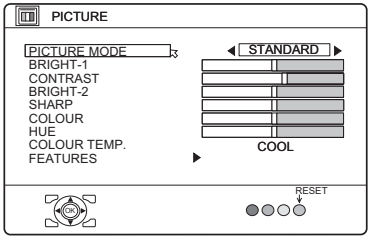
- The menu will disappear after about one minute if no operation is performed.

Operation with the buttons on the TV

You can also operate the menus using the buttons on the front panel of the TV.



PICTURE menu



- While the PICTURE menu is displayed, pressing the blue button will set the BRIGHT-1, CONTRAST, BRIGHT-2, SHARP, COLOUR, HUE settings to their default settings.
- When watching the picture from EXT-1 to EXT-4 or the PC, picture effect settings can be memorised for each external input by setting the picture effects in the PICTURE menu.
  The following items in the PICTURE menu are memorised.
  PICTURE MODE
  BRIGHT-1
  CONTRAST
  BRIGHT-2
  SHARP
  COLOUR
  HUE
  COLOUR TEMP.
  DIGITAL VNR
  COLOUR SYSTEM
  The last setting made for each item is memorised.

PICTURE MODE

You can choose one of three PICTURE MODEs to adjust the picture settings automatically.

BRIGHT:
Heightens contrast and sharpness.

STANDARD:
Standardizes picture adjustment.

SOFT:
Softens contrast and sharpness.

BRIGHT-1

You can adjust the back light.
◀ : darker
▶ : brighter

CONTRAST

You can adjust the picture contrast.
◀ : lower
▶ : higher

BRIGHT-2

You can adjust the picture brightness.
◀ : darker
▶ : brighter

SHARP

You can adjust the picture sharpness.
◀ : softer
▶ : sharper

COLOUR

You can adjust the picture colour.
◀ : lighter
▶ : deeper

HUE

You can adjust the picture tint.
◀ : reddish
▶ : greenish

- You can change the HUE setting (picture hue) when the colour system is NTSC 3.58, or NTSC 4.43.

COLOUR TEMP.

You can select one of three COLOUR TEMP. modes (three tones of white) to adjust the white balance of the picture. Since white is the colour which is used as a reference for all the other colours, changing the COLOUR TEMP. mode affects the appearance of all the other colours on the screen.

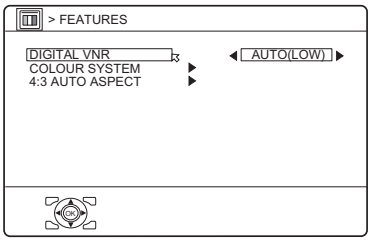
COOL:
A bluish white. Using this mode when watching bright pictures allows you to enjoy a more vivid and bright picture.

NORMAL:
The normal white colour.

WARM:
A reddish white. Using this mode when watching films allows you to enjoy colours that are characteristic of films.

FEATURES

Choose FEATURES and press the **OK** or ▶ button to display the sub-menu.



D1015-EN

■ DIGITAL VNR

The DIGITAL VNR function cuts down the amount of 'noise' ('snow' or interference) in the original picture.

ON:
This function is turned on.

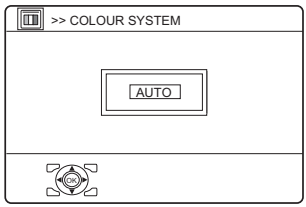
OFF:
This function is turned off.

■ COLOUR SYSTEM

The colour system is chosen automatically. However, if the picture is not clear or no colour appears, choose the colour system manually.

1 Choose COLOUR SYSTEM. Then press the OK or ▶ button

The sub-menu of the COLOUR SYSTEM function appears.



D0016-EN

2 Press the ▼/▲ buttons to choose the appropriate colour system. Then press the OK button

PAL:
PAL system

SECAM:
SECAM system

NTSC 3.58:
NTSC 3.58 MHz system

NTSC 4.43:
NTSC 4.43 MHz system

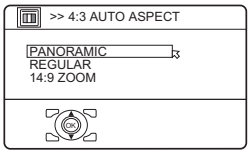
AUTO:
This function detects a colour system from the input signal. You can only use this when you are viewing a picture from programme number PR 0 (AV), or an EXT terminal.

- The AUTO function may not function properly if you have poor signal quality. If the picture is abnormal in the AUTO function, choose another colour system manually.
- When in the Programme numbers PR 0 (AV) to PR 99, you cannot choose NTSC 3.58 or NTSC 4.43.
- COLOUR SYSTEM cannot be chosen when you are watching the PC picture.

■ 4:3 AUTO ASPECT

You can choose one of three ZOOM modes, REGULAR, PANORAMIC or 14:9 ZOOM, as the ZOOM mode for the normal picture (4:3 aspect ratio).

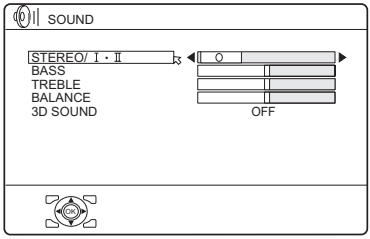
1 Choose 4:3 AUTO ASPECT then press the OK button



D0017-EN

2 Press the ▼/▲ buttons to choose a ZOOM mode

SOUND menu



D0019-EN

- When the headphones are connected, only "STEREO / I • II" can be used.

STEREO / I • II

When you are viewing a bilingual broadcast programme, you can choose the sound from Bilingual I (Sub I) or Bilingual II (Sub II). If you have poor reception on a stereo broadcast, you can change from stereo to mono sound so that you can hear the broadcast more clearly and easily.

: Stereo sound

: mono sound

I : Bilingual I (sub I)

II : Bilingual II (sub II)

- The sound mode you can choose differs depending on the TV programme.
- This function does not work in the EXT modes.

BASS

You can adjust the low tone of the sound.
◀ : weaker
▶ : strong

TREBLE

You can adjust the high tone of the sound.
◀ : weaker
▶ : strong

BALANCE

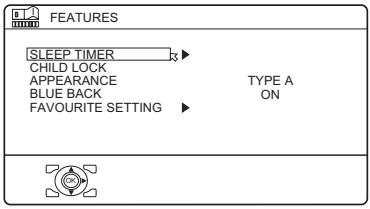
You can adjust the volume balance between the left and right speaker.
◀ : turn the left speaker's volume level up.
▶ : turn the right speaker's volume level up.

3D SOUND

You can enjoy Surround sound with a "live" effect by using the 3D SOUND function.

- You can choose a 3D SOUND mode from ON, MONO and OFF modes. For details, see "3D SOUND function" on page 18.
- You can also operate the 3D SOUND function with the button. For details, see "3D SOUND function" on page 18.

FEATURES menu



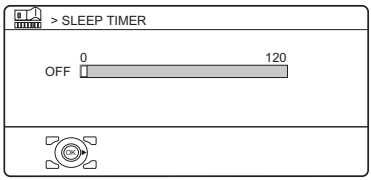
D0023-EN

SLEEP TIMER

You can set the TV to automatically turn off after a set period of time.

1 Choose SLEEP TIMER. Then press the OK or ▶ button

A Sub-menu of the SLEEP TIMER function appears.



D0024-EN

2 Press the ◀/▶ buttons to set the period of time. Then press the OK button

You can set the period of time for up to 120 minutes (2 hours) in 10 minute steps.

- One minute before the SLEEP TIMER function turns off the TV, "GOODNIGHT!" appears.
- The SLEEP TIMER function cannot be used to turn off the TV's main power.
- When the SLEEP TIMER function is on, you can display the sub-menu of the SLEEP TIMER function again to confirm or change the remaining period of time of the SLEEP TIMER function. Press the **OK** button to leave the menu after confirming or changing the remaining time.

To cancel the SLEEP TIMER function:

Press the ◀ button to set the period of time to "OFF".

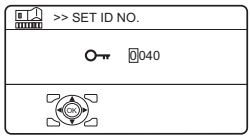
CHILD LOCK

When there is a TV channel you do not want your children to watch, you can use the CHILD LOCK function to lock out the TV channel. Even when a child chooses a programme number (PR) for a locked TV channel the screen will change to blue and display 🔒 (CHILD LOCK) so the TV channel cannot be viewed. Unless you enter a pre-set ID number by a special operation, the lock cannot be released and the child cannot view the TV channel.

■ To set the CHILD LOCK function

1 Choose CHILD LOCK, then press the 0 button

"SET ID NO." (ID number setting screen) appears.



D0025-EN

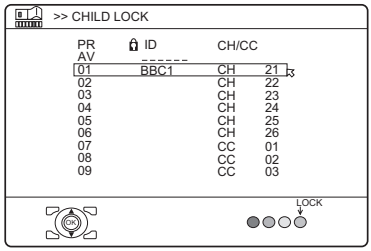
2 Set the ID number to your liking

1 Press the ▼/▲ buttons to choose a number.

2 Press the ◀/▶ buttons to move the cursor.

3 Press the OK button

The Sub-menu of CHILD LOCK appears.



D0026-EN

4 Press the ▼/▲ buttons to choose a TV channel

Every time you press the ▼/▲ buttons, the Programme number (PR) changes, and the picture of the TV channel registered in the Programme number (PR) is displayed on the screen.

5 Press the blue button and set the CHILD LOCK function. Then press the OK button

🔒 (CHILD LOCK) appears and the TV channel is locked.

To reset the CHILD LOCK function:
Press the blue button again.
🔒 (CHILD LOCK) disappears.

To disable easy resetting of the CHILD LOCK function, the menu disappears if you choose the CHILD LOCK function and press the **OK** button.

■ To view a locked TV channel

1 Choose a programme number (PR) of a locked TV channel with the number buttons or PR LIST

The screen changes to blue and the 🔒 (CHILD LOCK) appears. You cannot view the TV channel.



D0027-EN

2 Press the ⓘ (Information) button to display "ID NO." (ID No. input screen)



D0028-EN

3 Press the number buttons to enter the ID number

The lock is temporarily released so you can view the TV channel.

If you have forgotten the ID number:
Perform step 1 of "To set the CHILD LOCK function". After confirming the ID number, press the **TV** button to exit the menu.

- Even if you reset the lock temporarily, it does not mean that the CHILD LOCK function set for the TV channel is cancelled. The next time anyone tries to view the TV channel, it will be locked again.
- When you want to cancel the CHILD LOCK function, you must perform the operation "To set the CHILD LOCK function" again.
- To stop it being easy to choose the programme number (PR) of a locked TV channel, the programme number (PR) has been set so that it cannot be chosen with the ▼/▲ buttons or the buttons of the TV.
- To stop it being easy to reset the lock, "ID NO." (ID No. input screen) is set so that it cannot appear unless you press the ⓘ (Information) button.

APPEARANCE

Press the ◀/▶ button and choose the format in which the channel number is displayed from two types: TYPE A and TYPE B.

BLUE BACK

You can set the TV to automatically change to a blue screen and mute the sound if the signal is weak or absent, or when there is no input from an external device.

ON:
This function is turned on.

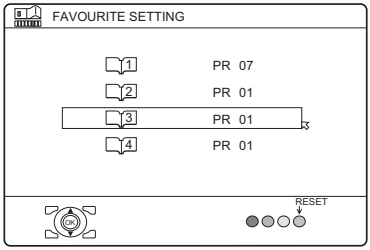
OFF:
This function is turned off.

FAVOURITE SETTING

Chose when deleting the favourite channels registered in the buttons 1 to 4.

1 Choose FAVOURITE SETTING, then press the OK or ▶ button

The FAVOURITE SETTING menu appears.



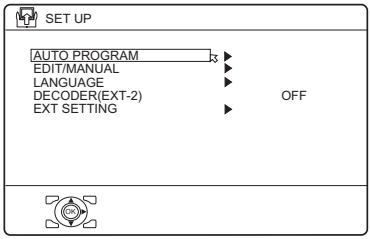
2 Press the ▼/▲ buttons and chose the favourite channel that you want to delete

3 Press the blue button

The chosen favourite channel and set contents are deleted.

- For details of the favourite channels, see “Favourite channel function” on page 19.

SET UP menu

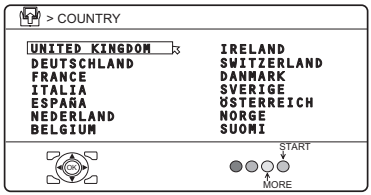


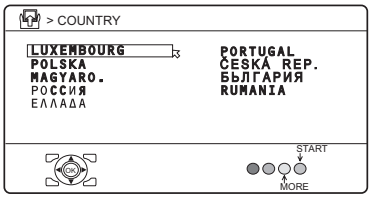
AUTO PROGRAM

You can again perform the AUTO PROGRAM function TV channel automatic registration which was performed in the "Initial settings" (page 7).

1 Choose AUTO PROGRAM, then press the OK or ▶ button

The COUNTRY menu appears as a sub-menu of the AUTO PROGRAM function. There are two COUNTRY menus. Pressing the yellow button changes the COUNTRY menu as follows:





2 Press the ◀/▶ and ▼/▲ buttons to choose the country where you are

3 Perform steps 5 and 6 of the "Initial settings" (page 8)

EDIT/MANUAL

The EDIT/MANUAL functions are divided into two types:

- editing the current programme numbers (PR) (EDIT functions); and
- manually storing a TV channel you want to view on a particular programme number (PR) (MANUAL function).

Here are the details about these functions:

MOVE:
This function changes the programme number (PR) of a TV channel.

ID:
This function registers a channel name (ID) to a TV channel.

INSERT:
This function adds a new TV channel in the current programme numbers (PR) list by using the CH/CC number.

- You cannot use the INSERT function if you do not know the channel number of a TV channel. Use the MANUAL function to register a TV channel in the programme number (PR).

DELETE:
This function deletes a TV channel you do not want to list.

MANUAL:
This function manually stores a new TV channel in a programme number (PR).

Caution

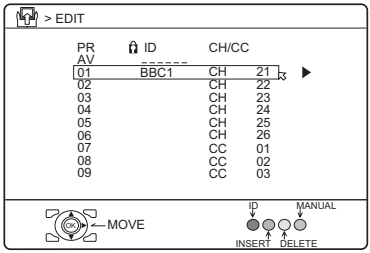
- Using the MOVE, DELETE or INSERT functions rewrites the current programme numbers (PR) list. Therefore, the programme numbers (PR) of some of the TV channels will change.
- Using the MANUAL function for a TV channel for which the CHILD LOCK function has been set cancels the CHILD LOCK function for that channel.

- Using the MANUAL function for a TV channel for which the DECODER (EXT-2) function has been set to ON returns the setting of the DECODER (EXT-2) function for that channel to OFF.
- When a TV channel has already been registered in PR 99, using the INSERT function deletes that TV channel.

■ Basic operation

1 Choose EDIT/MANUAL, then press the OK or ▶ button

The EDIT menu appears.

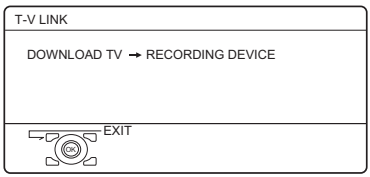


D0038-EN

2 Follow the description for the function you want to use

3 Press the OK button to complete the settings

The T-V LINK menu appears.



D0005-EN

If you do not have a T-V LINK compatible VCR connected:
Press the **TV** button to exit the T-V LINK menu.
The T-V LINK menu disappears.

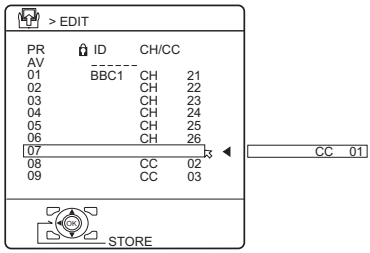
If you have a T-V LINK compatible VCR connected to the EXT-2 terminal:
Follow "Downloading the data to VCR" on page 10 to transmit the programme number (PR) data.

- For programme number PR 0, "AV" appears in the programme numbers (PR) list.
- An EXT terminal number does not appear in the programme numbers (PR) list.

■ MOVE

1 Press the ▼/▲ buttons to choose a TV channel

2 Press the ▶ button to start the MOVE function



D0030-EN

3 Press the ▼/▲ buttons to choose a new programme number (PR)

To cancel the MOVE function:
Press the **BACK** button.

4 Press the ◀ button to change the programme number (PR) of a TV channel to a new programme number (PR)

■ DELETE

1 Press the ▼/▲ buttons to choose a TV channel

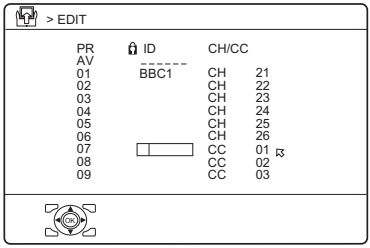
2 Press the yellow button to delete the TV channel

The TV channel is deleted from the programme numbers (PR) list.

■ ID

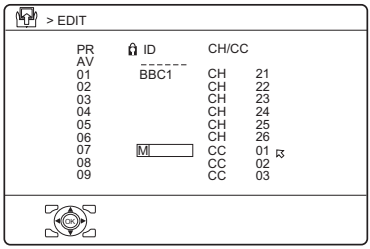
1 Press the ▼/▲ buttons to choose a TV channel

2 Press the red button to start the ID function



D0031-EN

3 Press the ▼/▲ buttons to choose a character



D0032-EN

4 Press the ◀/▶ buttons to move the cursor

5 Repeat steps 3 and 4 to complete the channel name

6 Press the OK button to give a channel name (ID) to a TV channel

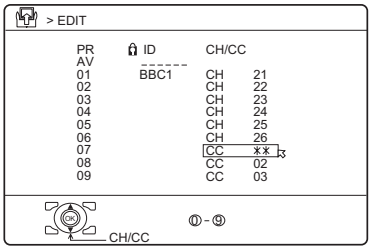
Before performing INSERT or MANUAL operation

- If you register the TV channel (SECAM-L system) from a French station, be sure to set the COUNTRY setting to FRANCE. If the COUNTRY setting is not set to FRANCE, perform steps 1 and 2 of the “AUTO PROGRAM” (page 32) procedure and set the COUNTRY setting to FRANCE before pressing the **OK** button.
- A CH/CC number unique to this TV and corresponding to the Channel number of a TV channel is required. Find the corresponding CH/CC number from a table “CH/CC numbers” on page 44 based on the Channel number of the TV channel.
- When the COUNTRY setting is not FRANCE, use a two-digit CH/CC number. When the COUNTRY setting is FRANCE, use a three-digit CH/CC number.

■ INSERT

1 Press the ▼/▲ buttons to choose a programme number (PR) for which you will register a new TV channel

2 Press the green button and start the INSERT function



D0034-EN

To cancel the INSERT function:
Press the **BACK** button.

3 Press the ▼/▲ buttons to choose "CH" or "CC", then enter the remaining CH or CC number

When the COUNTRY setting is FRANCE:
Choose "CH1", "CH2", "CC1" or "CC2".

The TV shifts to registration mode. When the registration is completed, the picture of the TV channel appears on the screen.

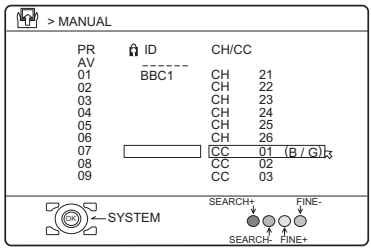
- The CH/CC number is a number given to each broadcast frequency that carries a TV channel. If the TV cannot detect the TV channel corresponding to the broadcast frequency indicated by the CH/CC number, a "no-signal" picture appears.

■ MANUAL

1 Press the ▼/▲ buttons to choose a programme number (PR) for a new TV channel

2 Press the blue button to activate the MANUAL function

At the right side following the CH/CC number, the SYSTEM (broadcasting system) of the TV channel appears.



D0035-EN

To cancel the MANUAL function:
Press the **BACK** button.

3 Press the ▶ button to choose the SYSTEM (broadcasting system) for a TV channel you want to register

TV channel (SECAM-L system) from a French station:
Set the SYSTEM to "L". If it is set to one other than "L", you cannot receive the TV channel of the SECAM-L system.

Other TV channels:
If you do not know the correct broadcasting system, set the SYSTEM to "B/G". If "B/G" is not correct, you will not hear the sound normally when the TV detects a TV channel. In this case, retry to set the SYSTEM correctly so that no problem arises.

4 Press the green or red button to search for a TV channel

Scanning stops when the TV finds a TV channel. Then the TV channel is displayed.

5 Press the green or red button repeatedly until the TV channel you want appears

If the TV channel reception is poor:
Press the blue or yellow button to fine-tune the TV channel.

6 Press the OK button and register the TV channel to a Programme number (PR)

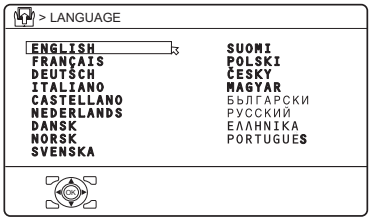
The normal EDIT menu is resumed.

LANGUAGE

The LANGUAGE setting which was performed in the "Initial settings" (page 7) can be changed.

1 Choose LANGUAGE, then press the OK or ▶ button

A sub-menu of the LANGUAGE function appears.



D0002-EN

2 Press the ◀/▶ and ▼/▲ buttons to choose a language. Then press the OK button

DECODER (EXT-2)

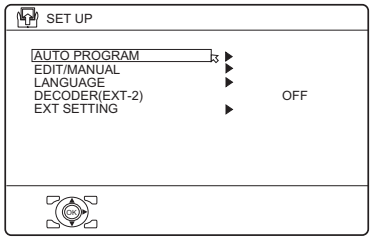
If you have a decoder connected to a T-V LINK compatible VCR, which in turn is connected to the EXT-2 terminal, use the DECODER (EXT-2) function to unscramble the scrambled TV channels.

1 Turn on the decoder power

2 Display the scrambled TV channel on the TV

Even if the decoder is working, a scrambled picture appears.

3 Display the SET UP menu and choose DECODER (EXT-2)



D0029-EN

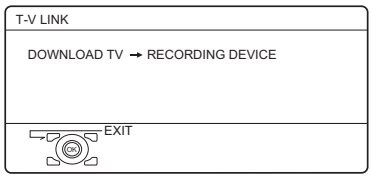
4 Press the ◀/▶ buttons to choose ON

An unscrambled picture appears.

To cancel the DECODER (EXT-2) function:
Press the ◀/▶ buttons to choose OFF.

5 Press the OK button to complete the setting

The T-V LINK menu appears.



D0005-EN

You can send the programme numbers data to a VCR with the T-V LINK function.

6 Turn on the VCR, and then press the OK button to transmit the data to VCR

The T-V LINK menu disappears once the data transmission ends.

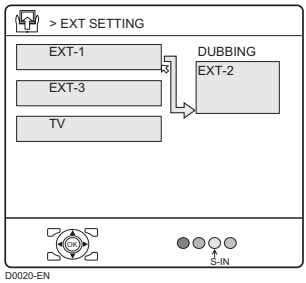
If the DECODER (EXT-2) function has been set to “ON” but the TV channel cannot be unscrambled, check the following:

- Has the decoder been connected to the VCR properly according to the VCR and decoder instruction manuals?
- Has the decoder power been turned on?
- Can the TV channel be unscrambled with a decoder?
- Do you need to change the VCR settings in order to connect the decoder? Confirm that the VCR is set properly by rechecking the VCR instruction manual.

EXT SETTING

1 Choose EXT SETTING, then press the OK or ▶ button

The EXT SETTING menu appears.



2 Follow the instructions for the function you want to use and operate the function

S-IN:
You can enjoy the high-quality picture of the S-VIDEO signal (Y/C signal).

ID LIST:
You can have a name for each of the devices connected for each EXT terminal.

DUBBING:
You can choose a signal source to be output from an EXT-2 terminal.

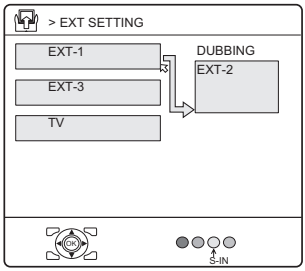
■ S-IN (S-VIDEO input)

You can connect a device (such as an S-VHS VCR) to enjoy the high-quality picture of the S-VIDEO signal (Y/C signal).

Preparation:

- First read the device’s instruction manual and “Additional preparation” on page 41 to connect the device to the TV properly. Second, follow the device’s instruction manual to set the device so that it sends an S-VIDEO signal (Y/C signal) to the TV.
- Do not set S-IN (S-VIDEO input) to an EXT terminal connected to a device which cannot output an S-VIDEO (Y/C signal).

1 Press the ◀/▶ or ▼/▲ buttons to choose an EXT terminal



D0020-EN

2 Press the yellow button and set the S-IN (S-VIDEO input). Then press the OK button

An S-IN (S-VIDEO input) mark is displayed. You can view an S-VIDEO signal (Y/C signal) instead of the regular video signal (composite signal).

To cancel the S-IN (S-VIDEO input) setting:

Press the yellow button and turn off S-IN (S-VIDEO input) mark. The regular video signal (composite signal) pictures are resumed.

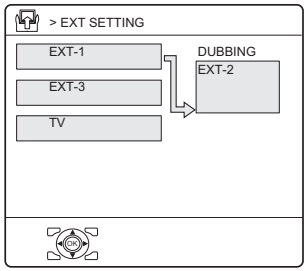
- Setting S-IN (S-VIDEO input) changes the head character from “E” to “S”. When an EXT terminal receives a normal video signal, “E1”, “E2” or “E3” appears on the display. This changes to “S1”, “S2” or “S3” when it receives an S-VIDEO signal.
- Even a device which can output an S-VIDEO signal (Y/C signal) may output a regular video signal (composite signal) depending on the device setting. If a picture cannot appear because the S-IN (S-VIDEO input) setting has been made, read the device instruction manual carefully again to check for the device settings.

■ DUBBING

You can choose a signal source to be output from the EXT-2 terminal.

You can do this with the output signals of the devices connected to other EXT terminals, or with the picture and sound from a TV channel you are currently viewing.

1 Press the ◀/▶ buttons to choose the arrow from the menu



D0022-EN

2 Press the ▼/▲ buttons to choose an EXT terminal or TV. Then press the OK button

The arrow in the menu represents a signal flow. The left side of the arrow shows a signal source output from the EXT-2 terminal.

EXT-1/EXT-3:

The output signal of the device connected to an EXT terminal passes through the TV and is output from the EXT-2 terminal.

TV:

The picture and sound of the TV channel you are currently viewing are output from the EXT-2 terminal.

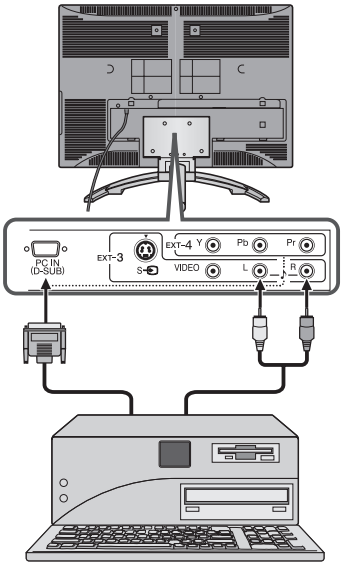
- During dubbing, you cannot turn off the TV. Turning off the TV also turns off the output from the EXT-2 terminal.
- When you choose an EXT terminal as an output, you can view a TV programme or a picture from the other EXT terminal while dubbing the picture from a device connected to the EXT terminal onto a VCR connected to the EXT-2 terminal.
- The RGB signals from TV games cannot be output. Teletext programmes cannot be output.

Displaying a computer screen

This TV can be used as a computer screen.

Connecting to the computer

Use a D-SUB cable to connect the TV's PC IN terminal to the computer's analogue RGB output terminal.
If you want to listen to the sound from the computer, use an audio cable to connect the EXT-3 L/R terminal to the computer's sound output terminal.
When the sound from the computer is mono, connect to the EXT-3 L terminal.



- Refer to the computer manual for a detailed explanation of the connections at the computer side.
- Ensure that the connectors are facing the correct way when connecting.
- After connecting the D-SUB cable, tighten the two screws to fix the connector in place.

Watching images from a computer

After starting the computer, press the AV or P ∨/∧ buttons to choose "PC"

"PC" is after EXT-4.
You can listen to the sound when the sound from the computer is connected to the EXT-3 L/R terminal.

- When the sound from the computer is connected to EXT-3, by choosing external input EXT-3 the sound from the computer can be listened to, but the images from the computer cannot be seen.

Table of signals for each type of computer

Resolution	Vertical frequency (Hz)	Horizontal frequency (kHz)
640 × 480 (VGA)	60.0	31.5
1024 × 768 (XGA)	60.0	42.0

* Only the above formats are supported.
* Even with the above formats and at 60 Hz, some problems may be experienced depending on the quality of the synchronous signal. (Depending on the quality, some pictures may not be displayed properly.)
* Apple Macintosh* computers are not supported.

When a picture is not displayed

Check the computer's refresh rate and set it to 60 Hz. Refer to the computer's instruction manual.
Computers which cannot have their refresh rate set to 60 Hz cannot be used with this unit.

* Apple Macintosh is a registered trademark of Apple Computer, Inc.

Additional preparation

Connecting external equipment

Connect the equipment to the TV, making the correct rear panel and front panel connections.

Before connecting anything:

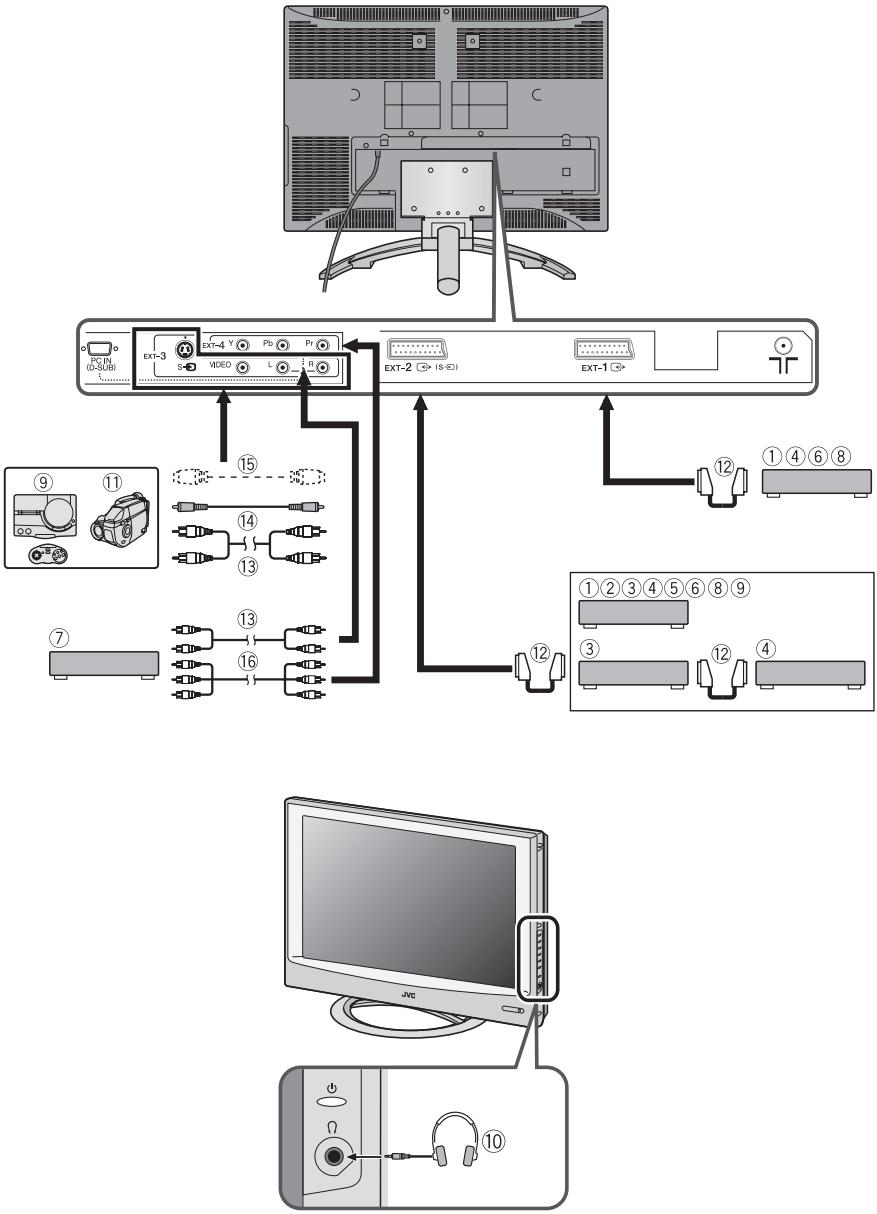
- Read the manuals that came with the equipment.
  Depending on the equipment, the connection method may be different from the diagram. Also, the equipment settings may need to change depending on the connection method.
- Turn off all the equipment including the TV.
- The “Specifications” on page 49 give the details of the EXT terminals. If you are connecting equipment not listed in the following connection diagram, see the table to choose the best EXT terminal.
- Connecting cables are not supplied.

■ Connecting the PC

For details, see “Connecting to the computer” on page 40.

① VCR (composite signal)
② VCR (composite signal/S-VIDEO signal)
③ T-V LINK compatible VCR (composite signal/S-VIDEO signal)
④ Decoder
⑤ DVD player (composite signal/S-VIDEO signal)
⑥ DVD player (composite signal/RGB signal)
⑦ DVD player (component video signals; Y/Pb/Pr)
⑧ TV game (composite signal/RGB signal)
⑨ TV game (composite signal/S-VIDEO signal)
⑩ Headphones
⑪ Camcorder (composite signal/S-VIDEO signal)
⑫ SCART cable
⑬ Audio cable
⑭ Video cable
⑮ S-VIDEO cable
⑯ Component cable

without terminal covers



■ Equipment which can output the S-VIDEO signal (Y/C signal) such as an S-VHS VCR

Connect the equipment to an EXT terminal other than EXT-1/EXT-4.
You can choose between an S-VIDEO signal (Y/C signal) and a regular video signal (composite signal). For details of how to operate the equipment, see “S-IN (S-VIDEO input)” on page 37.

■ T-V LINK compatible VCR

Be sure to connect the T-V LINK compatible VCR to the EXT-2 terminal. If not, the T-V LINK function will not work properly.

- When connecting a T-V LINK compatible VCR to the EXT-2 terminal, be sure to connect the decoder to the VCR. If not, the T-V LINK function may not work properly.
- When you connect the decoder to the VCR, after you have stored TV channels in the programme numbers (PR) list, set the DECODER (EXT-2) function for the programme number (PR) to ON to unscramble a scrambled TV channel. For details, see “DECODER (EXT-2)” on page 36.

■ Connecting headphones

Connect the headphones with a stereo mini-jack (3.5 mm diameter) to the headphone socket at the TV rear panel.

- No sound comes from the TV speakers when the headphones are connected.

■ Video or sound signal output from the EXT-2 terminal

You can change over the output of the video/sound signal from the EXT-2 terminal. This is useful when you want to dub the video/sound from another device onto the VCR connected to the EXT-2 terminal. For details on how to do this, see “DUBBING” on page 38.

- The signals from EXT-4 and PC IN terminal cannot be output from EXT-2.

■ TV output from the EXT-1 terminal

The video/sound signal of a TV channel you are viewing is always output from the EXT-1 terminal.

- Changing over a programme number (PR) also changes over the TV output from the EXT-1 terminal.
- The video/sound signal from an EXT terminal cannot be output.
- Teletext programmes cannot be output.

CH/CC numbers

When you want to use the INSERT function on page 35, find the CH/CC number corresponding to the Channel number of the TV channel from this table.

CH	Channel
CH 02 / CH 202	E2, R1
CH 03 / CH 203	E3, ITALY A
CH 04 / CH 204	E4, ITALY B, R2
CH 05 / CH 205	E5, ITALY D, R6
CH 06 / CH 206	E6, ITALY E, R7
CH 07 / CH 207	E7, ITALY F, R8
CH 08 / CH 208	E8, R9
CH 09 / CH 209	E9, ITALY G
CH 10 / CH 210	E10, ITALY H, R10
CH 11 / CH 211	E11, ITALY H+1, R11
CH 12 / CH 212	E12, ITALY H+2, R12
CH 21 / CH 221	E21, R21
CH 22 / CH 222	E22, R22
CH 23 / CH 223	E23, R23
CH 24 / CH 224	E24, R24
CH 25 / CH 225	E25, R25
CH 26 / CH 226	E26, R26
CH 27 / CH 227	E27, R27
CH 28 / CH 228	E28, R28
CH 29 / CH 229	E29, R29
CH 30 / CH 230	E30, R30
CH 31 / CH 231	E31, R31
CH 32 / CH 232	E32, R32
CH 33 / CH 233	E33, R33
CH 34 / CH 234	E34, R34
CH 35 / CH 235	E35, R35
CH 36 / CH 236	E36, R36
CH 37 / CH 237	E37, R37
CH 38 / CH 238	E38, R38
CH 39 / CH 239	E39, R39

CH	Channel
CH 40 / CH 240	E40, R40
CH 41 / CH 241	E41, R41
CH 42 / CH 242	E42, R42
CH 43 / CH 243	E43, R43
CH 44 / CH 244	E44, R44
CH 45 / CH 245	E45, R45
CH 46 / CH 246	E46, R46
CH 47 / CH 247	E47, R47
CH 48 / CH 248	E48, R48
CH 49 / CH 249	E49, R49
CH 50 / CH 250	E50, R50
CH 51 / CH 251	E51, R51
CH 52 / CH 252	E52, R52
CH 53 / CH 253	E53, R53
CH 54 / CH 254	E54, R54
CH 55 / CH 255	E55, R55
CH 56 / CH 256	E56, R56
CH 57 / CH 257	E57, R57
CH 58 / CH 258	E58, R58
CH 59 / CH 259	E59, R59
CH 60 / CH 260	E60, R60
CH 61 / CH 261	E61, R61
CH 62 / CH 262	E62, R62
CH 63 / CH 263	E63, R63
CH 64 / CH 264	E64, R64
CH 65 / CH 265	E65, R65
CH 66 / CH 266	E66, R66
CH 67 / CH 267	E67, R67
CH 68 / CH 268	E68, R68
CH 69 / CH 269	E69, R69

CC	Channel
CC 01 / CC 201	S1
CC 02 / CC 202	S2
CC 03 / CC 203	S3
CC 04 / CC 204	S4
CC 05 / CC 205	S5
CC 06 / CC 206	S6
CC 07 / CC 207	S7
CC 08 / CC 208	S8
CC 09 / CC 209	S9
CC 10 / CC 210	S10
CC 11 / CC 211	S11
CC 12 / CC 212	S12
CC 13 / CC 213	S13
CC 14 / CC 214	S14
CC 15 / CC 215	S15
CC 16 / CC 216	S16
CC 17 / CC 217	S17
CC 18 / CC 218	S18
CC 19 / CC 219	S19
CC 20 / CC 220	S20
CC 21 / CC 221	S21
CC 22 / CC 222	S22
CC 23 / CC 223	S23
CC 24 / CC 224	S24
CC 25 / CC 225	S25
CC 26 / CC 226	S26
CC 27 / CC 227	S27
CC 28 / CC 228	S28
CC 29 / CC 229	S29
CC 30 / CC 230	S30

CC	Channel
CC 31 / CC 231	S31
CC 32 / CC 232	S32
CC 33 / CC 233	S33
CC 34 / CC 234	S34
CC 35 / CC 235	S35
CC 36 / CC 236	S36
CC 37 / CC 237	S37
CC 38 / CC 238	S38
CC 39 / CC 239	S39
CC 40 / CC 240	S40
CC 41 / CC 241	S41
CC 75 / CC 275	X
CC 76 / CC 276	Y, R3
CC 77 / CC 277	Z, ITALY C, R4
CC 78 / CC 278	Z+1, R5
CC 79 / CC 279	Z+2

CH	Channel
CH 102	F2
CH 103	F3
CH 104	F4
CH 105	F5
CH 106	F6
CH 107	F7
CH 108	F8
CH 109	F9
CH 110	F10
CH 121	F21
CH 122	F22
CH 123	F23
CH 124	F24
CH 125	F25
CH 126	F26
CH 127	F27
CH 128	F28
CH 129	F29
CH 130	F30
CH 131	F31
CH 132	F32
CH 133	F33
CH 134	F34
CH 135	F35
CH 136	F36
CH 137	F37
CH 138	F38
CH 139	F39
CH 140	F40

CH	Channel
CH 141	F41
CH 142	F42
CH 143	F43
CH 144	F44
CH 145	F45
CH 146	F46
CH 147	F47
CH 148	F48
CH 149	F49
CH 150	F50
CH 151	F51
CH 152	F52
CH 153	F53
CH 154	F54
CH 155	F55
CH 156	F56
CH 157	F57
CH 158	F58
CH 159	F59
CH 160	F60
CH 161	F61
CH 162	F62
CH 163	F63
CH 164	F64
CH 165	F65
CH 166	F66
CH 167	F67
CH 168	F68
CH 169	F69

CC	Frequency (MHz)
CC 110	116 - 124
CC 111	124 - 132
CC 112	132 - 140
CC 113	140 - 148
CC 114	148 - 156
CC 115	156 - 164
CC 116	164 - 172
CC 123	220 - 228
CC 124	228 - 236
CC 125	236 - 244
CC 126	244 - 252
CC 127	252 - 260
CC 128	260 - 268
CC 129	268 - 276
CC 130	276 - 284
CC 131	284 - 292
CC 132	292 - 300
CC 133	300 - 306
CC 141	306 - 311
CC 142	311 - 319
CC 143	319 - 327
CC 144	327 - 335
CC 145	335 - 343
CC 146	343 - 351
CC 147	351 - 359
CC 148	359 - 367
CC 149	367 - 375
CC 150	375 - 383
CC 151	383 - 391

CC	Frequency (MHz)
CC 152	391 - 399
CC 153	399 - 407
CC 154	407 - 415
CC 155	415 - 423
CC 156	423 - 431
CC 157	431 - 439
CC 158	439 - 447
CC 159	447 - 455
CC 160	455 - 463
CC 161	463 - 469

- When two CH/CC numbers correspond to one Channel number, choose either one according to the current COUNTRY setting. When the COUNTRY setting is other than FRANCE, choose a two-digit CH/CC number. When the COUNTRY setting is FRANCE, choose a three-digit CH/CC number.
- Find the CH/CC number (CC110 to CC161) corresponding to the TV channel (SECAM-L system) from a French cable TV station, based on the broadcast frequency of the TV channel. When you do not know the broadcast frequency, please contact the cable TV station.
- The CH/CC numbers of CH102-CH169 and CC110-CC161 correspond to the TV channels being broadcast by a SECAM-L system. The other CH/CC numbers correspond to the TV channels being broadcast by a method other than a SECAM-L system.

Troubleshooting

If a problem arises while you are using the TV, please read this troubleshooting guide carefully before you ask to have the TV repaired. You may be able to fix it easily by yourself. For example, if the mains plug is disconnected from the mains outlet, or the TV aerial has problems, you may think there is a problem with the TV itself.

Important:

- This troubleshooting guide only covers problems whose causes are not easy to decide. If you have a question when you are operating a function, read the page(s) for that function carefully, not this troubleshooting guide.
- If you follow the advice in this troubleshooting guide without any success, unplug the mains plug and ask for your TV to be repaired. Do not attempt to repair the TV by yourself or to remove the rear cover of the TV.

■ If you cannot turn on the TV

- Is the mains plug connected to the mains outlet?
- Is the power lamp lit? If not, press the ⏻ button on the TV.
- Make sure you set the VCR/TV/DVD switch to the TV position. You cannot turn the TV on when the VCR/TV/DVD switch is set to the VCR or DVD position.

■ If you cannot turn off the TV

- Make sure you set the VCR/TV/DVD switch to the TV position. You cannot turn the TV off when the VCR/TV/DVD switch is set to the VCR or DVD position.

■ No picture or no sound

- Have you chosen a TV channel with very poor reception? If so, the BLUE BACK function will be activated: the entire screen becomes blue, and the sound is muted. If you still want to view the TV channel, follow the description “BLUE BACK” on page 30 to change the BLUE BACK function setting to OFF.
- If the SYSTEM setting for a TV channel is incorrect, it may prevent the sound from being issued. Follow the description “EDIT/MANUAL” on page 32 to use the MANUAL function to try to change the SYSTEM setting.

■ Poor picture

- If noise (snow) totally blocks out the picture, there may be a problem with the aerial or aerial cable. Check the following to try to solve the problem:
  - Have the TV and aerial been connected properly?
  - Has the aerial cable been damaged?
  - Is the aerial pointing in the right direction?
  - Is the aerial itself faulty?
- If the TV or aerial suffers interference from other equipment, stripes or noise may appear in the picture. Move any equipment such as an amplifier, personal computer, or a hair drier, that can cause interference away from your TV. Or try moving the TV. If the aerial suffers interference from a radio tower or high-voltage wire, please contact your local dealer.
- If the TV suffers interference from signals reflecting from mountains or buildings, double-pictures (ghosting) will occur. Try to change the aerial’s direction or replace it with one with better directionality.
- Are your COLOUR SYSTEM settings correct? Follow the description “COLOUR SYSTEM” on page 26 to try to solve the trouble.
- Have the COLOUR and BRIGHT settings been adjusted properly? Follow the description “BRIGHT-2” and “COLOUR” on page 25 to try to adjust them properly.

- Videotaping teletext is not recommended because it may not record correctly.
- When viewing images from commercially available video software products, or videos from videotapes which have been recorded improperly, the top of the image may be distorted. This is due to the condition of the video signal. There is nothing wrong with the TV.
- Since this TV is designed to make full use of the resolution of the original video source, the motion may appear unnatural when the video source is input with progressive-scanning component signals. If this occurs, change the output setting of the connected device to interlace-scanning component signal output. See the instructions that came with the device for more information.

■ Poor sound

- Have you adjusted BASS or TREBLE properly? If not, follow the description "BASS" or "TREBLE" on page 28.
- When TV channel reception is poor, it can be hard to hear stereo or bilingual sound. In this case, follow the description "STEREO / I • II" on page 28 to hear the sound more easily by changing it to a mono sound.

■ If the TV does not respond to the remote control

- Have the batteries of the remote control worn out? Follow the description "Putting the batteries into the remote control" on page 7 and replace them with new batteries.
- Have you attempted to use the remote control from the sides or rear of the TV or from more than seven metres away from the TV? Use the remote control in front of your TV or from less than seven metres away.
- When you are viewing a teletext programme, you cannot operate the menus. Press the **TV** button to return to the ordinary TV programme, and then try operating the menus.
- If the TV suddenly stops responding, disconnect the power cord of the TV from the AC outlet. Connect them to the AC outlet again to turn on the TV. If the TV returns to a normal state, it is not a failure.

■ Other issues

- When the SLEEP TIMER function operates, the TV is automatically turned off. If the TV suddenly turns off, try to press the ⏻/I (standby) button to turn on the TV once again. If the TV goes back to normal, there is no problem.
- When the TV is receiving a wide-screen signal (WSS) or a signal from an external device affecting the screen size, the ZOOM mode automatically changes. When you want to resume the previous ZOOM mode, press the **ZOOM** button again.
- It takes a short period of time from the time an operation such as changing channels is performed until an image is displayed. This is not a fault. This is the time needed for the image to stabilize before it can be displayed.
- The TV may make a crackling sound due to a sudden change in temperature. The picture or sound may be normal. If you hear crackling sounds frequently while you are viewing the TV, there may be other causes. As a precaution, ask your service technician to inspect it.

- The top of the TV and the screen may become hot during use but this has no affect on the performance of the TV. Make sure that the ventilation holes are not blocked.
- When the picture is unstable, the screen may become white for a moment. This happens when the signal which drives the liquid crystal is missing. This is not a fault.
- When a still image has been displayed for a long period, a faint residual image may remain on the screen for a short time after the power has been turned off or when another image is displayed. This is not a fault and the image will eventually disappear.

Specifications

Model	LT-32A60SJ
Broadcasting systems	CCIR B/G, I, D/K, L
Colour systems	PAL, SECAM • The EXT terminals also support the NTSC 3.58/4.43 MHz system.
Channels and frequencies	F2-F10, F21-F69, 116-172, E2-E12, E21-E69, S1-S41, X, Y, Z, Z+1, Z+2, A-H, H+1, H+2, R1-R12, R21-R69 • French cable TV channel of broadcast frequencies 116 - 172 MHz and 220 - 469 MHz.
Sound-multiplex systems	NICAM (B/G, I, D/K, L) system, A2 (B/G, D/K) system
Teletext systems	FLOF (Fastext), TOP, WST (World Standard System)
Power requirements	110 - 240 V AC, 50/60 Hz
Power consumption	158 W (Standby: 2.1 W)
Screen size	Viewable area 80 cm (measured diagonally)
Audio output	Rated Power output: 5 W + 5 W
Speakers	6.6 cm round × 2
EXT-1 terminal	Euroconnector (21-pin, SCART) • Video input, Audio L/R inputs and RGB inputs are available. • TV broadcast outputs (Video and Audio L/R) are available.
EXT-2 terminal	Euroconnector (21-pin, SCART) • Video input, S-VIDEO (Y/C) input, Audio L/R inputs and RGB inputs are available. • Video and Audio L/R outputs are available. • T-V LINK functions are available.
EXT-3 terminal	RCA connectors × 3 S-VIDEO connector × 1 • Video input, S-VIDEO (Y/C) input and Audio L/R inputs are available.
EXT-4 terminal	RCA connectors × 3 + EXT-3 L/R • Component video (Y, Pb, Pr) input and Audio L/R inputs are available. • 625p, 525p, and 750p signals are available. 750p signal is only available for 60Hz. • Some DVD players can output 625p, 525p and 750p signals. • 750p are new high-definition signals.
PC INPUT terminal	Analog RGB D-SUB (15 pin) × 1 • PC signal is available. Refer to page 40 for details of the signals which can be input.
Headphone jack	Stereo mini-jack (3.5 mm in diameter)
Dimensions (W × H × D)	820 mm × 602 mm × 225 mm 820 mm × 551 mm × 126.8 mm (without stand)
Weight	18.8 kg 15.4 kg (without stand)
Accessories	Remote control unit × 1 (RM-C1816S) AA/R6 dry cell battery × 2

We may change the design and specifications without notice.

Pictures displayed on the screen using this TV's ZOOM functions should not be shown for any commercial or demonstration purpose in public places (cafes, hotels, etc.) without the consent of the owners of copyright of the original picture sources, as this would be an infringement of copyright.

Model	LT-26A60SJ
Broadcasting systems	CCIR B/G, I, D/K, L
Colour systems	PAL, SECAM • The EXT terminals also support the NTSC 3.58/4.43 MHz system.
Channels and frequencies	F2-F10, F21-F69, 116-172, E2-E12, E21-E69, S1-S41, X, Y, Z, Z+1, Z+2, A-H, H+1, H+2, R1-R12, R21-R69 • French cable TV channel of broadcast frequencies 116 - 172 MHz and 220 - 469 MHz.
Sound-multiplex systems	NICAM (B/G, I, D/K, L) system, A2 (B/G, D/K) system
Teletext systems	FLOF (Fastext), TOP, WST (World Standard System)
Power requirements	110 - 240 V AC, 50/60 Hz
Power consumption	125 W (Standby: 2.0 W)
Screen size	Viewable area 66 cm (measured diagonally)
Audio output	Rated Power output: 5 W + 5 W
Speakers	6.6 cm round × 2
EXT-1 terminal	Euroconnector (21-pin, SCART) • Video input, Audio L/R inputs and RGB inputs are available. • TV broadcast outputs (Video and Audio L/R) are available.
EXT-2 terminal	Euroconnector (21-pin, SCART) • Video input, S-VIDEO (Y/C) input, Audio L/R inputs and RGB inputs are available. • Video and Audio L/R outputs are available. • T-V LINK functions are available.
EXT-3 terminal	RCA connectors × 3 S-VIDEO connector × 1 • Video input, S-VIDEO (Y/C) input and Audio L/R inputs are available.
EXT-4 terminal	RCA connectors × 3 + EXT-3 L/R • Component video (Y, Pb, Pr) input and Audio L/R inputs are available. • 625p, 525p, and 750p signals are available. 750p signal is only available for 60Hz. • Some DVD players can output 625p, 525p and 750p signals. • 750p are new high-definition signals.
PC INPUT terminal	Analog RGB D-SUB (15 pin) × 1 • PC signal is available. Refer to page 40 for details of the signals which can be input.
Headphone jack	Stereo mini-jack (3.5 mm in diameter)
Dimensions (W × H × D)	686 mm × 525 mm × 225 mm 686 mm × 474 mm × 121.5 mm (without stand)
Weight	15.6 kg 12.4 kg (without stand)
Accessories	Remote control unit × 1 (RM-C1816S) AA/R6 dry cell battery × 2

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